

# Draft Lower Athabasca Integrated Regional Plan 2011 - 2021

## Strategic Plan Implementation Plan

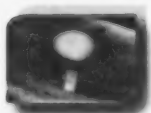
Government  
of Alberta

Image is from the Lower Athabasca Region



# Table of Contents

<b>Introduction.....</b>	<b>1</b>
Background .....	1
Purpose.....	1
Application .....	2
Plan Structure.....	4
<b>Strategic Plan</b>	
<b>The Region Today .....</b>	<b>5</b>
Economic Development.....	5
Ecosystems and Environment .....	7
Human Development .....	10
<b>The Future of the Region.....</b>	<b>12</b>
Regional Vision .....	12
How We Will Achieve the Vision.....	13
<b>Strategic Directions For The Region .....</b>	<b>15</b>
<b>Implementation Plan</b>	
<b>Strategies and Actions.....</b>	<b>23</b>
Outcome 1: The economic potential of the oil sands resource is optimized .....	24
Outcome 2: The region's economy is diversified .....	25
Outcome 3: Landscapes are managed to maintain ecosystem function and biodiversity ....	28
Outcome 4: Air and water are managed to support human and ecosystem needs .....	30
Outcome 5: Infrastructure development supports economic and population growth .....	33
Outcome 6: The quality of life of residents is enhanced through increased opportunities for recreation and active living .....	34
Outcome 7: Inclusion of aboriginal peoples in land-use planning.....	35
Monitoring, Evaluation and Reporting .....	36
Table 1: Regional Outcomes and Supporting Indicators .....	38
Table 2: Regional Outcomes and Strategies .....	40
Schedule A: LARP Digital Map .....	42
Schedule B: LARP Land Uses .....	44
Schedule C: Air Quality Management Framework Limits and Triggers .....	52
Schedule D: Groundwater Management Framework Interim Quality Triggers .....	53
Schedule E: Surface Water Quality Management Framework Limits and Triggers .....	54
Schedule F: Lakeland Country Iconic Tourism Destination Development and Management Plan .....	57
Schedule G: Lower Athabasca Regional Trail System Plan.....	58
<b>Appendix 1: Regulatory Details .....</b>	<b>60</b>



ISBN No. 978-0-7785-9382-9 (Printed Version)  
ISBN No. 978-0-7785-9383-6 (Online Version)  
Pub No. I/511  
Printed March 2011







# Introduction

## Background

Alberta's Land-use Framework, released in December 2008, sets out a new approach to managing our province's land and natural resources to achieve Alberta's long-term economic, environmental and social goals.

The *Alberta Land Stewardship Act*, proclaimed in October 2009, divides the province into seven regions and establishes the legal basis for the development of regional plans. One of these is the Lower Athabasca Regional Plan (LARP).

Contributions from the Lower Athabasca Regional Advisory Council, the public, First Nations and Métis communities, and stakeholders have informed the development of the LARP.

## Purpose

The Lower Athabasca Regional Plan (LARP) sets the stage for robust growth, vibrant communities and a healthy environment within the region over the next 50 years.

With that long-term horizon in mind, the LARP identifies strategic directions for the region over the next 10 years. The regional plan will be reviewed and, if necessary, updated every five years to maintain its relevance and effectiveness.

### The LARP:

- Establishes a long-term vision for the region;
- Aligns provincial policies at the regional level to balance Alberta's economic, environmental and social goals;
- Uses a cumulative effects management approach to balance economic development opportunities and social and environmental considerations;
- Sets desired economic, environmental and social outcomes and objectives for the region;
- Describes the strategies, actions, approaches and tools required to achieve the desired outcomes and objectives;
- Establishes monitoring, evaluation and reporting commitments to assess progress; and
- Provides guidance to provincial and local decision-makers regarding land-use management for the region.

## Elements of a Cumulative Effects Management System

**Outcomes-based:** Driven by clearly defined outcomes for the desired quality or state of the environment now and in the future, while recognizing the economic, environmental and social implications of meeting those objectives. Activities will be managed to achieve outcomes.

**Place-based:** Different regions may have different needs and outcomes.

**Knowledge-based:** Foundation of the system is a sound knowledge base and performance management, composed of information and evaluation to determine if outcomes are being met or management actions required.

**Adaptive:** The system can adapt to change when performance results are not achieving outcomes, or there is a risk of not achieving outcomes in the future or when circumstances change.

**Shared stewardship:** Collaborative development of outcomes to build commitment for the shared responsibility to achieve outcomes.

Through regional planning, as well as other initiatives, Alberta is shifting to a more effective and efficient management system that considers the cumulative effects of all activities and improves integration across the economic, environmental and social pillars. This system must adapt to place-based challenges and opportunities as well as allow decision-makers to see the bigger picture.

This direction is a foundation of the *Land-use Framework*, where the Alberta government committed to managing the cumulative effects of development on air, water, land and biodiversity at the regional level. This approach focuses on achievement of outcomes, understanding the effects of multiple development pressures (existing and new), assessment of risk, collaborative work with shared responsibility for action and improved integration of economic, environmental and social considerations.

Cumulative effects management approaches involve setting outcomes and objectives, along with the strategies and actions that will be used to achieve them. Integrated monitoring, evaluation and reporting systems are essential for cumulative effects management.

## Application

Planning and decision-making in our province is carried out under various Alberta legislation and policies. These are applied by a range of decision-makers – including Alberta government departments, boards and agencies, and municipal governments – making decisions about activities in the region.

Decision-makers are required to ensure their plans and decisions are consistent with the LARP.

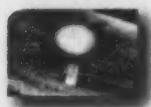
The LARP applies to Crown and private lands in the region.

### Private Lands

Planning on private lands is primarily governed by the *Municipal Government Act* and the *Subdivision and Development Regulation*.

Municipal governments maintain their responsibility and authority for local land-use planning and development on all lands within their boundaries. This includes the creation of municipal development plans, area structure plans and land-use bylaws. This delegated authority will remain with municipalities. Municipal planning and development decisions will have to be in compliance/alignment with the regional plan to achieve the regional outcomes established in the plan.

Private landowners make decisions about how to use and manage their land consistent with existing provincial and municipal legislation. The LARP does not change this or alter private property rights.



The LARP, including sub-regional plans, does not rescind land title or freehold mineral rights. Any decisions that may affect private landowners will occur through existing legislation and processes, and private landowners remain entitled to due process and compensation under those laws.

### Crown Lands

Crown lands include lands that are administered as public lands under the *Public Lands Act*, parks under the *Provincial Parks Act* and highways under the *Public Highways Development and Protection Act*. Crown lands are owned by the Crown and managed for the benefit of all Albertans. The Alberta government often allows individuals and businesses to use public lands through statutory consents by giving permission to do certain activities on public land – such as livestock grazing, tree harvesting, energy development or recreational use. In addition, the Alberta government gives statutory consents related to the use of — or impacts on — public resources (like water) to allow or support specific development, industrial activity, conservation or other activities.

On public lands, direction under the LARP will be delivered through existing legislation such as the *Public Lands Act*, the *Forests Act* and the *Provincial Parks Act* and through existing tools such as access management and forest management planning. These will further define access to - and use of - provincial Crown land, and focus on operational activities that reflect the regional priorities and direction.

Development decisions on Crown lands will have to be in compliance/alignment with the regional plan to achieve the regional outcomes established in the plan.

## Planning



## Informing Land-use Decisions

The LARP will be implemented by those who already make land-use decisions – municipal governments and provincial ministries, boards and agencies. The *Alberta Land Stewardship Act* ensures that decisions are made using the processes and mechanisms that already exist.

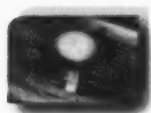
The implementation of regional plans must follow the laws of Alberta. All decisions that implement regional plans will be made through existing laws – including the *Municipal Government Act*, the *Public Lands Act*, the *Forests Act*, the *Surface Rights Act* and the *Alberta Land Stewardship Act*. All rights to appeal, requirements for due process and compensation enjoyed by landowners and rights holders under these laws remain in effect.

Decision-makers include Alberta government departments, boards and agencies and municipal governments who have legal authority to grant a development permit, a water licence, a project approval or some other form of statutory consent. All decision-makers will be required to ensure their regulatory instruments conform to and comply with the LARP. They must also use the regional plan to inform their policies.

## Plan Structure

The LARP has three key components:

- **Strategic Plan** - includes the vision for the future of the region along with desired regional outcomes. It builds on existing policies and initiatives by establishing a set of strategic directions that help achieve the regional vision and outcomes.
- **Implementation Plan** - includes regional objectives, strategies and actions that will be undertaken to support achievement of the regional vision and outcomes and indicators to measure and evaluate progress.
- **Regulatory Detail** - enables achieving the strategic direction and strategies and actions.



# Strategic Plan

## The Region Today

The Lower Athabasca Region covers approximately 93,260 square kilometres and is located in the northeast corner of Alberta.

It is bordered to the north by the Northwest Territories and to the south by the County of Vermilion River, County of St. Paul and Smoky Lake County. To the east, it is bordered by Saskatchewan and to the west, Wood Buffalo National Park, MacKenzie County and the Municipal District of Opportunity.

### Economic Development

One of the most significant characteristics of the region is the abundance of oil sands resources. The region includes the Athabasca oil sands area, which contains approximately 81 per cent of the province's bitumen reserves, and much of the Cold Lake oil sands area.

To put this into context, the oil sands are the second largest petroleum reserve in the entire world, second only to Saudi Arabia. Utilizing current technology, approximately 175 billion barrels of bitumen, or 10 per cent of the entire estimated reserve, can be recovered economically. Given technological innovation and advances in the future that could further develop the resource, the full potential of 1.71 trillion barrels of bitumen could be reached in the future.

Alberta's oil sands are a large and secure resource that have the potential to meet not only our domestic and national energy needs, but offer security of supply to the global community in the future. Alberta has a stable political environment and a commitment to develop this vast resource in ways that achieve social and environmental sustainability.

Our oil sands resource represents a unique economic opportunity for Alberta - an opportunity to be a world energy leader through optimizing opportunities for development, while ensuring our environmental responsibilities are met. Alberta is well-positioned to deliver on this through continuous improvement in how we explore for, develop and extract our oil sands resources, through a strong regulatory system and an emphasis on new technology and innovation. Alberta is committed to optimizing the economic potential of the resource, but will do so in ways that are environmentally sustainable and socially acceptable.

The oil sands have emerged as a major contributor to the Albertan and Canadian economies, attracting billions of dollars in investment and generating employment and income for hundreds of thousands of workers in Alberta and across North America.

Oil sands investment has increased dramatically over the past two decades, jumping from \$490 million in 1991 to a high of over \$20 billion in 2008. As oil prices and the global





economy recover from the global recession, oil sands investment is expected to grow by 28 per cent to over \$14 billion in 2011. This investment means long-term and well-paying jobs in the region, a sustainable source of tax revenue for the province and for Canada, and communities that benefit from the investments made in those cities and towns.

Royalty revenues from oil sands development provide valuable services to Albertans, including important infrastructure, and a world class education system and health care delivery. Future royalties will provide Albertans with continued high quality public services, low taxes and an enhanced quality of life.

Abundant opportunities exist for local residents, particularly aboriginal peoples, to participate in this economic activity. This participation takes on many forms. In some cases local residents are directly employed by oil sands producers. However, with over one-hundred aboriginal-owned businesses in the region, there has been significant development of entrepreneurial enterprises to provide services needed by producers, as well as communities developing equity through community owned-and-operated corporations and joint ventures.

The Lower Athabasca Region is a diversified economy, and is fast becoming a major international center for innovation for oil sands and environmental technologies. It is anticipated that local manufacturing and services will continue to expand in support of increasing oil sands development in the region. These trends will continue to stimulate development of larger and more diverse retail centres, and growing commercial and professional services and facilities.

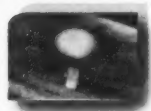
Although oil sands development constitutes the vast majority of energy development in the region, natural gas exploration and development will continue. One of the major consumers of natural gas is the oil sands industry.

Other sectors such as minerals, forestry, agriculture, tourism and service providers also contribute to the economic vitality and prosperity of the region.

Parts of the region in the north are potentially rich in metallic and industrial minerals (e.g., uranium) and base and precious metals. There is also significant potential for commercial deposits of building stone such as granite, limestone and sandstone. While there have been some geological and exploration surveys completed over the past two decades, the region is still considered under-explored.

Sand, gravel, crushed stone, clay and shale deposits are located throughout the region and are important resources to support both industrial and urban growth development.

Forestry is a significant industry within the region, providing employment opportunities for local residents. The forest resource is managed in a sustainable way using a tenure system that includes timber permits, timber quotas and forest management agreements (FMAs). About 40 per cent of the region is managed under a FMA with embedded timber quotas and permits under the community timber program. A small portion of Green Area public land not covered by FMA is managed under coniferous timber quotas and permits under the community timber program.



The expansion of oil sands development in the region creates challenges for forest companies. A growing portion of timber for the region's mills now comes from salvage connected to oil sands and other non-renewable resource developments. Reductions in the forestry land base accumulate due to the long time horizon for reclamation of oil sands areas. Timber shortfalls are projected over the term of the regional plan.

Approximately five per cent of the region's total land area is used for agriculture. The vast majority of this land is located in the southern part of the region. While the province-wide trend is towards fewer, larger farms, the Lower Athabasca appears to be resisting this trend. Farming in the Lower Athabasca is made up of a higher proportion of small-to-medium sized operations. Agriculture will remain a prominent and important land use in the region for the foreseeable future.

Tourism in the Lower Athabasca is primarily based on the many natural attractions within the area, including lakes, rivers, forests and natural areas. These natural attractions provide a range of guided and unguided tourism activities in the region, including hunting, fishing, ecotourism and other adventure-based activities. Growing demand for quality lake-based recreation provides opportunities for the region to further develop its tourism potential and diversify its economic base.

The regional economy is important to community viability and sustainability. For example, the Canadian Forces Base Cold Lake generates important economic opportunities for the regional and provincial high-tech supply and services sectors. As service and supply industries that support development of the oil sands grow in response to increasing operating, repair and maintenance expenditures, as well as capital upgrading, communities become more stable and permanent.

## Ecosystems and Environment

The Lower Athabasca Region contains diverse landforms, vegetation and species.

The vast majority of the Lower Athabasca Region is within the Boreal forest, which is characterized by deciduous, mixedwood and coniferous forests interspersed with extensive wetlands, lakes and streams. The northeast corner of the region is Canadian Shield, characterized by rocky exposures and glacial deposits.

We have a wide range of fish, wildlife and plant species in the region, including 28 species of fish; over 500 vascular plant species; numerous songbirds, owls and waterfowl; and mammals such as moose, deer, wolves, black bears, muskrat and lynx. The region serves as breeding grounds and staging areas for birds during migration and over-wintering periods. Some species found in the Lower Athabasca, such as the woodland caribou, have been identified as species at risk under the federal *Species at Risk Act* and the provincial *Wildlife Act*.



The region spans the catchment areas of three water basins: the Athabasca River Basin, the Beaver River Basin and the Peace/Slave River Basin. Water basins within the region are important over-wintering, spawning and rearing grounds for fish.

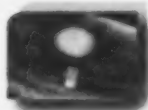
The Athabasca River flows north through the region, draining into the Peace-Athabasca Delta near Lake Athabasca. Water quality varies considerably along the length of the Athabasca River and is influenced by natural factors (e.g., geology, soils, groundwater and precipitation), as well as point and non-point source inputs from human development (e.g., industrial wastewater, urban runoff). At present, wastewater loadings to the Lower Athabasca River are limited. As such, the water quality index in the Lower Athabasca River — upstream and downstream of Fort McMurray — has consistently demonstrated ratings in the good to excellent range.

The Athabasca River is the main source of water for oil sands mining activities. Close to five percent of the Athabasca River's average annual flow (measured just downstream of Fort McMurray) has currently been allocated for use, with three percent of the flow allocated to oil sands mining operations. Less than one percent of the flow is actually used, as many users do not use their full allocation or they return treated water back to the river after use. Concerns about management of the river primarily focus on seasonal variations in flow and periods of low flow.

For in situ oil sands activities, groundwater is the main source of water used. Aquifers in the region have the potential to become affected by resource extraction development and other activities occurring in the region. Historical data indicates a high degree of variability throughout the region created by the natural hydrogeologic (the effect of subsurface water through rocks and on rocks) complexity.

Air quality in the region is influenced by climate and weather systems as well as activities occurring inside and outside of the region. Activities in the region — including industrial, municipal and other sectors — are associated with emissions of a variety of substances, including greenhouse gases, nitrogen oxides, sulphur dioxide, hydrogen sulphide and others. Between 1997 and 2008, air quality — as indicated by the Air Quality Index — has been rated as "good" more than 95 per cent of the time, based on monitoring in Fort Chipewyan, Fort McMurray, Fort MacKay, Anzac, Cold Lake and one oil sands industry site. Air pollutant levels measured at all monitoring stations within the region have remained below annual average Alberta Ambient Air Quality Objective (AAAQO) levels. However, some pollutants have exceeded their one-hour or 24-hour AAAQO levels, including some issues with odour causing substances in recent years.

The Lower Athabasca Region represents the province's fastest growing regional source of greenhouse gas (GHG) emission, accounting for approximately 15 percent of the province's total GHG emissions. This is largely due to oil sands development. However, it is important to note that the oil sands industry has dramatically reduced its GHG emissions intensity — that is, the level of emissions per unit of production — by approximately 45 percent since 1990.



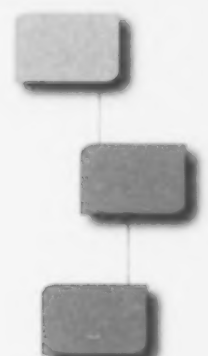
The cumulative effects of increasing population and economic growth and development in the region are increasing the pressures on the region's air, water, land and biodiversity. We are committed to responsible development. Our current environmental management system is intended to reduce and minimize the impacts of development on the environment. A range of regulatory and non-regulatory management tools are employed.

The system is supported by a number of key pieces of legislation, including:

- *Environmental Protection and Enhancement Act* – Provides for the assessment and regulation of activities to minimize their environmental impacts. Activities are designated based on their level of risk. Activities with higher risks are subject to increasing levels of regulatory oversight.
- *Water Act* – Provides for the use and allocation of Alberta's water resources, including the protection of rivers, streams, lakes and wetlands.
- *Climate Change and Emissions Management Act* – Provides for the management and reporting of carbon dioxide, methane and other specified gases, and requires measurable reductions in greenhouse gas emissions.
- *Public Lands Act* – Provides for the setting of land disturbance standards and land conservation tools in support of biodiversity management.
- *Forests Act* – Provides for sustainable management of Alberta's forests, including a legislated requirement for reforestation.
- *Wildlife Act* – Allows for designation and recovery of species at risk.
- *Provincial Parks Act* – Plays an important role in protecting natural diversity and intact habitat for supporting biodiversity, in addition to ensuring a wide range of recreation opportunities and tourism experiences.

In addition to legislation, a number of strategies, such as the *Clean Air Strategy*, *Water for Life* and the *Land-use Framework* provide high level direction about air, water, land and biodiversity management goals, and how Alberta will achieve these goals. More detailed operational policies take their direction from these higher level strategies and legislation, and translate them into more clearly defined expectations.

On behalf of all Albertans, the government also delivers and supports many programs that benefit the environment. Many of these are delivered in partnership with individuals, organizations, the private sector and other governments. Examples include: species at risk recovery programs, invasive species management and management practices to minimize biodiversity impacts. Of particular significance in this region, the Government of Alberta encourages the forest and energy sectors to engage in integrated land management (ILM) practices in an effort to co-ordinate their operations and minimize the industrial footprint. Furthermore, we are committed to progressive reclamation to help ensure environmental and land management objectives are met.



In order to understand the effectiveness of Alberta's environmental management tools, the region's air, water, land and biodiversity are monitored, evaluated and reported on. Monitoring initiatives in the region include the Wood Buffalo Environmental Association, the Lakeland Industrial Community Association, the Regional Aquatics Monitoring Program and the Alberta Biodiversity Monitoring Institute.

There is significant investment in environmental monitoring systems in the Lower Athabasca Region, including systems for air, surface water, groundwater, land and biodiversity. Alberta is currently undertaking a review of environmental monitoring, evaluation and reporting systems. Recommendations from the Provincial Environmental Monitoring Panel are expected in 2011 regarding the development of an integrated, world-class monitoring system for the Lower Athabasca River, encompassing both the condition of the river and effects of development on the river, as well as recommendations on how the system can be expanded to all media in the region and to the entire province.

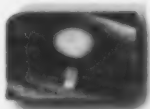
The Alberta government is also committed to working with Alberta residents to better understand their health concerns. The government is initiating community health assessments in Alberta communities potentially impacted by industrial development, starting with two communities — Fort Chipewyan and Fort McKay — with a view to implementing this approach in other Alberta communities. Community health assessments are done to identify potential risks to the health of a population, and the strategies that can be taken to mitigate the risks. The government will work with local leaders and experts from multiple fields to ensure community residents understand why the assessment is being done, what tools will be used to collect data and what we hope to learn from doing it. Community participation is a key priority to gather the facts on health concerns facing such communities and to develop realistic solutions to address them.

## Human Development

The expansion of oil sands development in the region has created thousands of employment opportunities, attracting workers from across Canada and around the world. This has contributed to significant population growth in the region, especially in the Regional Municipality of Wood Buffalo, where the majority of growth has occurred in Fort McMurray.

The rate of growth of social and physical infrastructure has not kept pace with rapid population growth and a higher demand for diverse recreational opportunities.

Use of the provincial highway network in the region has markedly increased. The most notable example is Highway 63, the provincial highway that connects Fort McMurray to southern Alberta. Other highways in the region have also realized greater traffic.



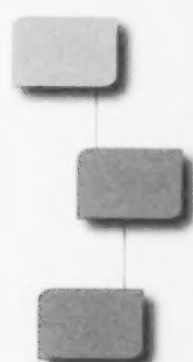
Greater use of outdoor recreational opportunities such as camping, picnic and day use areas and trail-based recreation are contributing to environmental impacts, public safety issues, conflict among land users and a loss of the benefits associated with recreation. The region is seeing greater use of trails, an increase in use of recreational vehicles and a corresponding increase in demand for trail development.

Approximately six per cent of the region is currently within the provincial parks system. In addition to providing spaces for outdoor recreation and tourism, these lands contribute to conservation values and support biodiversity.

There is also rising demand in the region for new initiatives to foster, promote and preserve cultural activities and cultural heritage.

Over 700 archeological sites in the region have significant cultural deposits and will require avoidance or further scientific investigation. Approximately 25 highly significant archeological sites are found in the region, including the Quarry of the Ancestors, which is in the final stages of designation as a Provincial Historical Resource.

The Alberta government collaborates with aboriginal communities toward protecting traditional use locations of cultural and spiritual significance. These places can be determined to be historic resources and subject to protection under the *Historical Resources Act*.





# The Future of the Region

## Regional Vision

The vision for the Lower Athabasca Region reflects the *Land-use Framework's* vision of Albertans working together to respect and care for the land as the foundation to our economic, environmental and social well-being.

### **The Government of Alberta's Vision for the Lower Athabasca Region**

The Lower Athabasca Region is a vibrant and dynamic region. People, industry and government partner to support development of the region and its oil sands reserves. Economic opportunities abound in forestry, agriculture, infrastructure development, the service industry and tourism. The region's air, water, land and biodiversity support healthy ecosystems and world class conservation areas. Growing communities are supported by infrastructure, and people can enjoy a wide array of recreation and cultural opportunities.

The vision describes a desired future state for the Lower Athabasca in which the region's diverse economic opportunities are balanced with social and environmental considerations using a cumulative effects management approach. Cumulative effects management focuses on achievement of outcomes, understanding the effects of multiple development pressures, assessment of risk, collaborative work with shared responsibility for action and integration of economic, environmental and social considerations.

Alberta's *Provincial Energy Strategy* calls for our province to be "a global energy leader, recognized as a responsible world-class energy supplier, an energy technology champion, a sophisticated energy consumer and a solid global environmental citizen."

The national and international significance of the oil sands resource means that oil sands development will continue to be a centrepiece of Alberta's energy mix, and a dominant activity in the region.

Alberta is committed to responsible development of the oil sands resource, and our province has a strong regulatory system. However, the nature of oil sands development presents unique challenges. Building on decades of experience managing the oil and gas resources, we recognize the need for enhanced co-ordination and integration to continue to ensure the safe, responsible and efficient development of our energy resources.

We must carefully manage the environmental and social impacts associated with our long-term opportunities for oil sands development. Clarity is paramount to the industry in making long-term investments in Alberta. Alberta's intentions and expectations around environmental and social outcomes need to be clear so that those who operate on the landscape can co-ordinate, innovate and succeed in creating a balanced set of economic, environmental and social outcomes for the region.



The Government of Alberta recognizes that to meet the challenges we face, environmental management needs to shift to a cumulative effects management approach in order to maintain an acceptable level of air, water, land and biodiversity integrity, while enabling long-term economic benefits for the region and the province.

It is also critical that Alberta attracts and retains a skilled workforce required to support our economic outcomes. Governments and industry need to work together to ensure the quality of life in the region meets the expectations of its residents. To achieve this, deliberate steps must be taken to increase the supply and diversity of recreation opportunities in the region.

We also have to consider infrastructure to support economic development and sustainable communities. In order to maximize the economic potential of the regional economy, a new systematic and holistic way of looking at the impacts of development is required.

These shifts are already underway, as signalled by major Government of Alberta policy frameworks and strategies including the *Provincial Energy Strategy*; *Responsible Actions: A Plan for Alberta's Oil Sands*; *Water for Life*; and the *Plan for Parks*. The LARP translates these to the regional context, and builds upon them by setting out strategic directions that will support achievement of the vision.

As a result of a recent review on the government's regulatory processes, the Regulatory Enhancement Project, action is being taken. Action is also being taken to ensure that Alberta's oil and gas regulatory system is effective and efficient. This includes more co-ordinated policy development and fundamental improvements to the structure of Alberta's regulatory system, such as the consolidation of regulatory functions into a single regulator to achieve an integrated, streamlined process.


## How We Will Achieve the Vision

To achieve the regional vision, the LARP establishes seven desired regional outcomes. The regional outcomes are consistent with and support the province-wide outcomes set out in the *Land-use Framework*, namely:

- Healthy economy supported by our land and natural resources;
- Healthy ecosystems and environment; and
- People-friendly communities with ample recreation and cultural opportunities.

Successfully achieving the regional outcomes requires new and improved approaches and tools for managing our lands and natural resources.

The LARP also identifies strategic directions that will improve our ability to balance economic, environmental and social outcomes in the region.



### Lower Athabasca Regional Outcomes

#### Healthy economy supported by our land and resources

- The economic potential of bitumen is optimized; and
- The region's economy is diversified.

#### Healthy ecosystems and environment

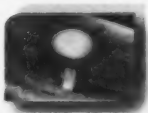
- Landscapes are managed to maintain and enhance ecosystem function and biodiversity; and
- Air and water is managed to enhance and maintain ecological integrity and human health.

#### People-friendly communities with ample recreational and cultural opportunities

- Infrastructure development supports economic and population growth;
- The quality of life of residents is supported through increased opportunities for recreation; and
- Land-use planning balances the constitutionally protected rights of aboriginal peoples and the interests of all Albertans.

These include:

- Improving the integration of industrial activities on the landscape;
- Encouraging timely and progressive reclamation of disturbed lands;
- Managing air, water and biodiversity through management frameworks that take proactive approaches and set limits and triggers, and minimizing land disturbance in the region;
- Designating new conservation areas that are large, interconnected and maintain intact habitat to support biodiversity;
- Strengthening infrastructure planning to support future growth of the region;
- Designating new recreation and tourism areas to provide diverse recreation opportunities to local residents and tourism products for visitors to the region; and
- Inclusion of aboriginal peoples in land-use planning.





## Strategic Directions for the Region

The responsible development of Alberta's bitumen resource is the platform for continued economic growth and success that brings with it tremendous benefits to the people of the Lower Athabasca Region, Alberta and Canada.

About 1.3 million barrels of crude are produced every day in the oil sands, a number that is expected to more than double within the decade. While oil sands development will be the dominant economic driver, other sectors such as forestry, conventional gas, minerals, agriculture and other industries and service providers contribute to the economic vitality and prosperity of the region.

We will continue implementation of:

- The *Alberta Provincial Energy Strategy and Responsible Actions: A Plan for Alberta's Oil Sands*, which together provide a long-term action plan for Alberta to achieve clean energy production, wise energy use and sustained economic prosperity; and
- Improved regulatory processes to enhance competitiveness of oil sands, forestry and other key industries.

Steps must be taken as the economy grows and diversifies to ensure multiple industries can co-exist on the landscape in ways that maximize opportunities, while minimizing impacts to the environment. Most industrial activity in the region occurs on Crown land which primarily exists as natural forest cover. By minimizing the footprint of industrial disturbance and encouraging timely, progressive reclamation, these lands can contribute to biodiversity values.

### Improving integration of industrial activities

Oil sands development is expected to remain a dominant economic activity in the region. This activity, along with other regional planning aspects like the creation of conservation areas, will have consequences for the forestry industry in terms of timber supplies.

Consistent with current legislation and policy, the Government of Alberta will continue to work with our forestry industry on strategies to mitigate timber shortfalls. For example, expanding intensive forest management on public lands and working to reduce losses to natural factors such as wildfire, insects and disease.

Industrial operators, along with the diversity of commercial and industrial operators who directly or indirectly support oil sands development, must work together to better integrate their activities on public land. To date, the oil sands and forest industries have engaged in integrated land management practices on a voluntary basis in an effort to minimize environmental footprint. For example, sharing roads and collaboratively planning operations.

The LARP will make integrated landscape management between all industrial operators on public land a necessary element of doing business. This will result in better co-ordination of industrial activities such as shared road networks and infrastructure on public lands; reducing land disturbance to productive forest land base; minimizing timber shortfalls; and minimizing environmental impacts.

### **Encouraging timely and progressive reclamation**

Reclamation of industrial sites is a requirement under Alberta legislation, primarily under the *Environmental Protection and Enhancement Act* and the *Public Lands Act*. In general, these laws require that land be returned to an equivalent capability following the completion of industrial activities.

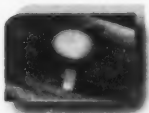
Mineable oil sands projects present unique circumstances, since they are sizeable and occur over several decades. It is not practical or desirable to wait until activities are complete before commencing reclamation.

The new progressive reclamation strategy for oil sands mining operations will help ensure that disturbed lands are reclaimed in a timely fashion. As work is completed on portions of an overall site, those portions will be progressively reclaimed and the progress will be publicly reported.

In addition, the Government of Alberta will establish a tailings management framework for mineable oil sands operations by 2012. The framework will provide guidance on managing tailings to provide assurance that fluid fine tailings will be reclaimed as quickly as possible, and that legacy (current) inventories will be reduced. The framework will establish regional limits, as well as a focus on the development and implementation of new technologies over the next ten years.

Over 80 per cent of Alberta's oil sands are recoverable through in situ methods, which have a different development footprint than surface mining because of the way oil sands are extracted. In situ methods include steam-assisted gravity drainage (SAGD) and cyclic steam stimulation. These methods are used to extract bitumen from deposits too deep to be accessed by mining. In situ oil sands reclamation will be enhanced through initiatives to manage land disturbance and conserve land to support biodiversity. Reclamation requirements continue to be an important tool to ensure that regional objectives related to conservation of landscapes and environmental management are met.

Reclaimed lands will be used to help achieve the region's desired economic, environmental and social outcomes based on the region's evolving needs. As the oil sands resource is recovered and land is reclaimed over time, this represents an opportunity to enhance the network of interconnected land to achieve regional objectives biodiversity for recreation and forestry.



## Managing air, water, and biodiversity and minimizing land disturbance

The Alberta government is committed to managing cumulative effects at the regional level. Management frameworks are a new approach that is being used to accomplish this, where outcomes and objectives are set along with the strategies and actions to achieve them. Regional management frameworks for air quality, surface water quality and groundwater were developed. These frameworks are intended to provide context within which decisions about future activities and management of existing activities should occur. The management frameworks do this by confirming regional objectives and establishing environmental limits and triggers. Limits in these frameworks are clear boundaries in the system not to be exceeded. Triggers are to be used as warning signals to allow for evaluation, adjustment and innovation on an ongoing basis.

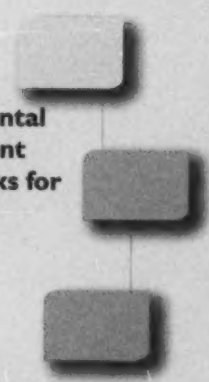
Air and water conditions in the region will be monitored with reference to the frameworks. If trends in air or water approach a trigger level, the management response includes assessing the need for action as outlined in the frameworks. This proactive and dynamic management approach will help ensure negative trends are identified and assessed, regional limits are not exceeded and the air and water remain healthy for the region's residents and ecosystems.

Decision-makers will make choices about activities on the landscape, considering where limits and triggers in the air and water management frameworks are relative to regional air and water conditions. If environmental conditions are approaching — or reach — environmental limits, there will be management actions either restricting further development or enabling changes to current management. Management changes may allow development to proceed in a way that meets the regional objectives and keeps the environmental condition below limits.

The establishment of environmental limits provide context for decision-making by government and by proponents. They also encourage industries and other land users to employ best practices, new technologies and process improvements to minimize impacts on the region's air and water.

To complement the new frameworks for air and water management, the Alberta government is committed to updating the surface water quantity management framework for the Lower Athabasca River by 2012. The *Water Management Framework: Instream Flow Needs Water Management System for the Lower Athabasca* was developed in 2007, and is being implemented. Work is continuing to update this water quantity management framework.

In addition to supporting legislation, notably the *Fisheries Act* and *Wildlife Act*, the Alberta government protects and manages biodiversity through a number of programs, often in partnership with environmental organizations and the private sector. These include educational and research programs, support for environmental stewardship and monitoring and reporting activities.



### Environmental Management Frameworks for the Lower Athabasca Region

- Air Quality Management Framework for the Lower Athabasca Region;
- Groundwater Management Framework for the Lower Athabasca Region;
- Surface Water Quality Management Framework for the Lower Athabasca River;
- Water quantity management framework for the Lower Athabasca River to be updated; and
- Biodiversity management framework for the Lower Athabasca Region to be developed.

A new biodiversity management framework for the Lower Athabasca Region will bring context to these efforts at the regional level. The framework will be developed by 2013 and will:

- Identify the network of biodiversity conservation areas in the region;
- Set targets for selected biodiversity indicators (vegetation, aquatic and wildlife); and
- Address caribou habitat needs in alignment with provincial caribou policy.

A regional land disturbance plan will also be developed by 2013 to support the biodiversity framework. The plan will acknowledge an expansion in land disturbance to meet our economic outcome to optimize oil sands development, while addressing biodiversity goals through a well co-ordinated, planned and managed environmental footprint. Essential to this approach is integrated land management by the industrial operators contributing to the environmental footprint, and introduction of a land disturbance limit. Best available ILM practices to reduce environmental footprint will be utilized, but the site-specific practices or tools to employ will not be prescribed. Features of ILM in the Lower Athabasca include:

- Co-ordinated industry planning of major access corridors and associated development infrastructure on public land (i.e., camps, remote airstrips);
- Progressive and timely reclamation of land not required for further oil sands development;
- Timely removal of linear disturbances; and
- Managed public motorized access, where applicable.

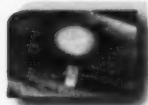
As with air and water, the enforcement of a land disturbance limit will encourage industry and other land users to employ innovative approaches to reduce their environmental footprint. Triggers will be developed to guide proactive, early management intervention actions to avoid land disturbance limits. Limits will be set on a regional level, but areas important to economic development (such as oil sands) will experience higher levels of disturbance, and areas important for biodiversity such as caribou and moose habitat will experience lower levels of disturbance. The process to establish a regional disturbance limit will involve stakeholders to ensure the limits appropriately reflect anticipated future growth and development in parts of the region, as well as environmental and social values.

All of these frameworks are an integral part of cumulative effects management and are intended to work in concert with existing environmental legislation, regulation and policy.

#### **Key Criteria for Conservation Areas**

- Areas with little to no industrial activity;
- Areas that support aboriginal traditional uses;
- Areas that are representative of the biological diversity of the area (e.g., landforms, species, vegetation); and
- Areas of sufficient size (i.e., roughly 4000-5000 square kilometres).

*- Terms of Reference for Developing the Lower Athabasca Regional Plan*



#### **Designating new conservation areas**

A significant aspect of the LARP is the balance it strikes between development and conservation in the region. Approximately 16 per cent of the region's land base is to be designated as conservation areas. These lands are in addition to the existing six per cent of the region already protected as wildland provincial





parks, which have conservation management intent. These areas will help achieve environmental objectives, especially those for biodiversity by maintaining ecological systems and processes for future biodiversity and, in doing so creating benchmark areas for assessing ecological integrity.

Conservation areas are selected for their consistency with the Alberta government's key criteria for conservation areas, as outlined in the *Terms of Reference for Developing the Lower Athabasca Regional Plan*. Of significant note is that the areas represent large, intact and interconnected areas of Boreal forest.

The new conservation areas and existing parks and protected areas will result in more than two million hectares of conserved lands in the northeastern part of the region supporting wildlife movement and habitat stability. The new conservation areas will be enacted under the *Public Lands Act* or the *Provincial Parks Act*. Some areas will allow for a limited level of ecosystem or natural disturbance-based vegetation management (e.g., logging, prescribed fire) in accordance with international guidelines for protected areas. This will partly guide the choice of legal designation.

The conservation areas will be managed to minimize and prevent land disturbance. This means that the development of some types of industrial tenure, such as oil sands, minerals and commercial forestry, are not considered compatible with the management intent of conservation areas. There is precedent in Alberta where exploration and development of petroleum and natural gas tenure occurs in legislated protected areas. The environmental footprint associated with this type of development is significantly less than for other industrial development activities, such as mining.

Tenures subject to cancellation as a result of the Lower Athabasca Regional Plan will be compensated in accordance with existing legislation, specifically, the *Mines and Minerals Act*, the *Mineral Rights Compensation Regulation* and the *Forests Act*. The intent of this legislation is to return affected companies to the position they were in prior to obtaining the cancelled tenure.

Petroleum and natural gas tenure and other recreational leases will be honoured, consistent with current policy and international guidelines for conservation areas.

Any new petroleum, natural gas tenure or mineral rights tenure sold in a conservation area will include a restriction that prohibits surface access. This will not preclude the development of resources lying underneath conservation areas.

Conservation areas will be managed to provide low-impact backcountry recreation opportunities and tourism products. Hunting, fishing and trapping will continue in accordance with our provincial law. Motorized recreation will continue on designated trails that exist when the LARP is approved and random recreation will not be permitted.

## 20-Year Strategic Capital Plan - Key Areas

- Municipal infrastructure;
- Provincial highway network, other transportation and corridors;
- health facilities;
- Schools;
- Post-secondary education facilities;
- Housing and provincial government facilities;
- Community facilities; and
- Water and wastewater facilities.

Some of the proposed conservation areas in the Lower Athabasca include important caribou habitat. The land disturbance plan will establish land disturbance limits and industrial practices to minimize industrial footprint in identified caribou habitat. Alberta's recovery plan and management actions focus on maintenance and restoration of identified populations and habitat.

### Strengthening infrastructure planning

Substantial investment in the Lower Athabasca has contributed to significant population growth in the region.

The ability to attract and retain skilled workers to the region will be essential to enable the region's future economic growth and diversification. This will require meeting increased demands on the region's social and physical infrastructure and for more recreation opportunities.

The Alberta government co-ordinates capital expenditure planning through *Alberta's 20-Year Strategic Capital Plan*, which serves as a long-term blueprint to guide decisions about infrastructure projects. Through the three-year capital plan, the Alberta government delivers on the highest priority commitments identified in the 20-year plan.

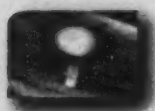
Among the key assumptions of the 20-year plan is that major urban centres and the Wood Buffalo area will experience the largest growth in population.

To augment planning for areas of the province where oil sands development will contribute to growth pressures, the Government of Alberta has begun the Comprehensive Regional Infrastructure Sustainability Planning (CRISP) for the Athabasca and Cold Lake oil sands areas. These two oil sands areas overlay much of the Lower Athabasca Region.

The CRISP will make recommendations for necessary infrastructure in the region based on a expected population levels at certain oil sands production levels. This approach will enable regional infrastructure needs to be anticipated as regional economic and population growth occur over time. The CRISP will be used to inform government decision-making regarding infrastructure priorities.

The majority of Wood Buffalo's population growth is occurring almost entirely in Fort McMurray. The 2010 municipal census indicates that Fort McMurray's population grew by 80 per cent since 2000. Current projections indicate that its population will increase to 133,000 by 2028.

The immediate need for urban expansion is being met by release of Crown lands for two residential neighbourhoods. Parsons Creek and Saline Creek are being planned, and are expected to accommodate an additional 40,000 people. Other Crown lands are being released to accommodate industrial/commercial growth in Fort McMurray.



A cross-ministry project aimed at establishing an urban development reserve (UDR) in the vicinity of Fort McMurray is underway. Through this, government will identify lands to be designated for future growth and a co-ordinated process will be implemented for the timely release of public lands to support urban growth.

This new approach will ensure the timely release of Crown lands in support of the growth of Fort McMurray and the growth of the oil sands industry.

### **Providing new recreation and tourism opportunities**

The Government of Alberta is committed to growing the tourism industry. There is significant potential to increase the number of visitors and tourism revenue within the Lower Athabasca Region. To optimize the tourism potential, the plan establishes six new public land areas for recreation and tourism and 10 new provincial recreation areas. The focus will be on working with the private sector to develop new tourism products and enhanced recreational opportunities.

The regional plan includes a commitment to plan and develop the province's next iconic tourism destination – Lakeland Country. Lakeland Country has the province's highest density of quality recreational lakes and many attractive tourism features, but its tourism potential is currently under-realized. The Government of Alberta will work closely with municipal governments, the private sector, aboriginal peoples, interested private landowners and other stakeholders to create tourism attractions, activities, amenities and accommodations. Private landowners will continue to make decisions about how to use and manage their land consistent with existing provincial and municipal legislation. The plan for Lakeland Country does not change this or alter private property rights. Lakeland Country will make Alberta even more attractive to tourism investors, and help diversify the region's economy.

Currently, approximately six per cent of the region is part of the Alberta parks system and managed under the *Provincial Parks Act* or the *Wilderness Areas, Ecological Reserves, Natural Areas or Heritage Rangelands Act*. However, most of this land is ecologically sensitive and not favourable for recreation or tourism development. Existing recreation and tourism opportunities in the region's parks are not meeting demands for outdoor recreation — particularly serviced and un-serviced camping, motorized recreation, day use and trails. Other opportunities on public lands are random, which lead to environmental impacts, land-use conflicts and public safety issues.

Recreation and tourism opportunities are important for attracting and retaining the skilled workforce needed to support the region's economic growth. They also contribute to economic diversification in the region and enhance the quality of life. The Government of Alberta is committed to taking steps to enhance recreation opportunities in the province, through strategies such as the *Plan for Parks*, the Alberta Recreation Corridors and Trails Designation Program, *Active Alberta* and through other programs and services aimed at recreation development.



To further support these initiatives, and to provide for additional recreation and tourism opportunities for residents, 10 new provincial recreation areas will be designated in the region. The areas have been selected based on their desirability for recreation, their proximity to population centres and their ability to offer connectivity to conservation areas where possible.

These new recreation areas account for approximately two per cent of the region, providing long-term access to a larger land base managed for recreation and tourism values. This will enable the region's highest-value recreation and tourism features to receive greater management attention. It will also offer greater certainty to investors, helping support growth of the tourism sector.

Similar to conservation areas, tenures subject to cancellation as a result of changing the focus to recreation and tourism areas will be compensated in accordance with existing legislation, specifically, the *Mines and Minerals Act*, The Mineral Rights Compensation Regulation and the *Forests Act*. Petroleum and natural gas tenure and other recreational leases will be honoured.

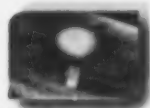
The new recreation and tourism areas will be managed to provide a diversity of opportunities that reflect residents' preferences and are appropriate for the locations of the areas. Some areas, for example, will be managed for only primitive or nature-based recreation, while others will be managed to support and enhance managed motorized recreation opportunities or provide areas for intensive tourism development.

### **Including aboriginal peoples in land-use planning**

The Government of Alberta is committed to consulting with aboriginal peoples when government decisions may adversely affect the continued exercise of their constitutionally protected rights.

The Alberta government will invite First Nations who have expressed an interest in Richardson's Backcountry to be involved in a sub-regional initiative called the First Nations – Richardson Backcountry Stewardship and Tourism Initiative (or Richardson Initiative).

The Alberta government will also work with First Nations to identify potential tourism and cultural opportunities in the region, including Quarry of the Ancestors, Bitumount and Fort Chipewyan.



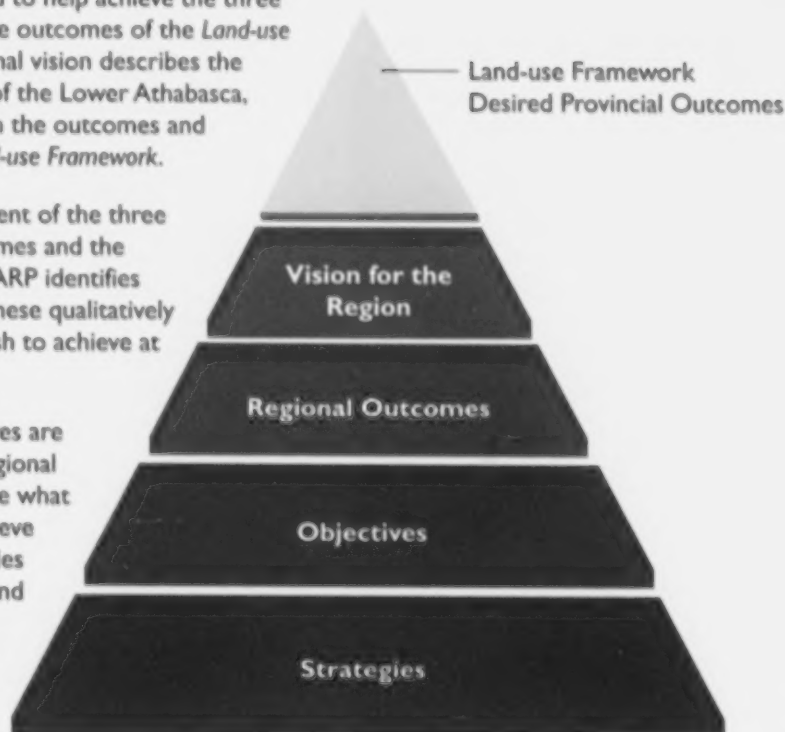
# Implementation Plan

## Strategies and Actions

The LARP is designed to help achieve the three desired province-wide outcomes of the *Land-use Framework*. The regional vision describes the desired future state of the Lower Athabasca, and is consistent with the outcomes and principles of the *Land-use Framework*.

To support achievement of the three province-wide outcomes and the regional vision, the LARP identifies regional outcomes. These qualitatively describe what we wish to achieve at the regional level.

A number of objectives are identified for each regional outcome and describe what must be done to achieve the outcome. Strategies describe regulatory and non-regulatory approaches that will be used to achieve each objective.



As a means of assessing whether regional outcomes and objectives are being achieved, a series of economic, environmental and social indicators will be regularly monitored, evaluated and reported.

Various governments, ministries and agencies will work together in an integrated manner as they develop the required system and tools to support implementation of the regional plan. While the following strategies and actions each fall primarily into the mandate of one or two ministries, it is important to note that a government-wide approach will be taken in implementing the strategies. This is part of the shift to a cumulative effects management system as envisioned by the *Land-use Framework*.

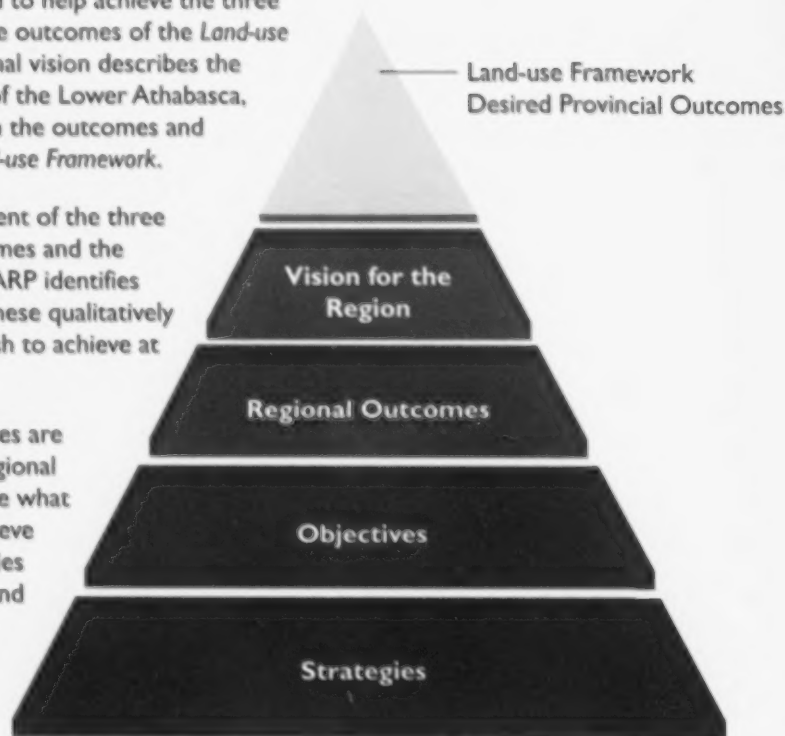
# Implementation Plan

## Strategies and Actions

The LARP is designed to help achieve the three desired province-wide outcomes of the *Land-use Framework*. The regional vision describes the desired future state of the Lower Athabasca, and is consistent with the outcomes and principles of the *Land-use Framework*.

To support achievement of the three province-wide outcomes and the regional vision, the LARP identifies regional outcomes. These qualitatively describe what we wish to achieve at the regional level.

A number of objectives are identified for each regional outcome and describe what must be done to achieve the outcome. Strategies describe regulatory and non-regulatory approaches that will be used to achieve each objective.



As a means of assessing whether regional outcomes and objectives are being achieved, a series of economic, environmental and social indicators will be regularly monitored, evaluated and reported.

Various governments, ministries and agencies will work together in an integrated manner as they develop the required system and tools to support implementation of the regional plan. While the following strategies and actions each fall primarily into the mandate of one or two ministries, it is important to note that a government-wide approach will be taken in implementing the strategies. This is part of the shift to a cumulative effects management system as envisioned by the *Land-use Framework*.

## Land-use Framework - Provincial Outcomes

- Healthy economy supported by our land and natural resources;
- Healthy ecosystems and environment; and
- People-friendly communities with ample recreational and cultural opportunities.

## Vision For The Lower Athabasca Region

The Lower Athabasca Region is a vibrant and dynamic region. People, industry and government partner to support development of the region and its oil sands reserves. Economic opportunities abound in forestry, minerals, agriculture, infrastructure development, the service industry and tourism. The region's air, water, land and biodiversity support healthy ecosystems and world class conservation areas. Growing communities are supported by infrastructure, and people can enjoy a wide array of recreation and cultural opportunities.

## Regional Outcomes

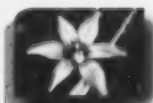
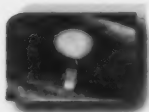
1. The economic potential of the oil sands resource is optimized;
2. The region's economy is diversified;
3. Landscapes are managed to maintain ecosystem function and biodiversity;
4. Air and water are managed to support human and ecosystem needs;
5. Infrastructure development supports economic and population growth;
6. The quality of life of residents is enhanced through increased opportunities for recreation and active living; and
7. Aboriginal peoples are included in land-use planning.

### Outcome 1:

The economic potential of the oil sands resource is optimized

### Strategies:

- a) Continue implementation of the **Alberta Provincial Energy Strategy** and **Responsible Actions: A Plan for Alberta's Oil Sands** which together provide a long-term action plan for Alberta to achieve clean energy production, wise energy use and sustained economic prosperity. Alberta will remain a global energy leader; recognized as a responsible world-class energy supplier; an energy technology champion; a sophisticated energy consumer; and a solid global environmental citizen.
- b) Continued implementation of **improved regulatory processes** to enhance competitiveness of oil sands and other key industries. More co-ordinated policy development and integration of regulatory delivery will ensure that Alberta's oil and gas regulatory system is modern, efficient, performance-based and competitive, while maintaining high environmental standards.



- c) Continued implementation of the **Building and Educating Tomorrows Workforce** initiative to develop the knowledge and skills of Albertans, retain workers in Alberta's labour market and to attract new workers, particularly for the oil sands companies and their service industries through the **Strategy for Alberta's Energy Sector**.
- d) Continue implementation of the **Aboriginal Development Initiative** to increase participation of aboriginal communities and businesses in Alberta's regional economic development.
- e) Identify critical economical **linkages to markets**.

Over the long term, the economic success of the oil sands depends on technical innovations and their commercialization for development, production and processing and to the success of our industry partners' ability to competitively develop our resources. Alberta's regulatory framework will ensure industry maintains its competitiveness, and regulatory oversight will ensure that social and environmental objectives in the LARP are achieved.

Provincial legislation governing the oil sands industry includes the *Mines and Minerals Act*, the *Oil Sands Conservation Act*, the *Energy Resources Conservation Act*, the *Freehold Minerals Tax Act*, the *Pipeline Act*, the *Alberta Corporate Tax Act*, the *Environmental Protection and Enhancement Act*, the *Water Act* and the *Public Lands Act*. Various other regulatory and non-regulatory requirements including policies, strategies and frameworks apply as well.

Supporting indicators for outcome:

- Regional labour force by sector;
- Provincial royalties;
- Personal income;
- Bitumen production rate;
- Investment and capital stock; and
- Cost of production.

## Outcome 2:

**The region's economy is diversified**

### Forestry

#### Objective:

- Prevent future shortfalls in timber supply.

#### Strategies:

- a) To minimize loss of productive forest land, industrial and commercial operators on public land will use an **integrated land management** approach including practices such as planning common major access corridors (shared roads) and infrastructure (camps, remote air strips), progressive reclamation of disturbed land no longer needed for oil sands development and timely removal of linear disturbances.

- b) The forest industry will identify opportunities to **intensively manage forest stands and regeneration** on public land for the purpose of improving growth rates.

Forest industry is primarily governed by the *Forests Act* and the *Public Lands Act*, and associated standards (Forest Planning Standard, Timber Harvest Ground Rules, Enhanced Approval Process standards).

**Indicators:**

- Area of public land actively managed for intensive forestry.
- Area of land disturbance on productive land base on public land in the region.

**Agriculture**

**Objective:**

- Maintain and diversify the region's agricultural industry.

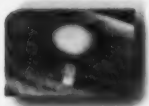
**Strategies:**

- Municipalities are encouraged to **identify areas** where agricultural activities, including extensive and intensive agricultural and associated activities, should be the primary land use in the region.
- Municipalities are encouraged to **limit the fragmentation** of agricultural lands and their premature conversion to other non-agricultural uses, especially within the areas where agricultural has been identified as a primary land use in the region.
- Where possible, municipalities are encouraged to direct non-agricultural subdivision and development to areas where such development will **not constrain agricultural activities**, or to areas of lower quality agricultural lands.
- Municipalities are encouraged to strive to **minimize conflicts between intensive agricultural operations and other land uses** by using reciprocal setback distances and other mitigative measures.

Provincial legislation governing the agriculture industry includes the *Municipal Government Act*, the *Alberta Agricultural Operation Practices Act* and the *Public Lands Act* with respect to grazing leases. In addition, the Natural Resources Conservation Board is involved with regulating confined feeding operations.

**Indicator:**

- Fragmentation and conversion of agricultural land to non-agricultural land uses.





## Tourism

### Objective:

- Tourism potential of the region is optimized.

### Strategies:

- a) Plan and develop **Lakeland Country** as an iconic tourism destination in collaboration with local stakeholders. (See Schedule A – LARP Digital Map and Schedule F for details.)
- b) Work collaboratively with the private sector and local governments to **enhance and expand the supply** of sustainable public and private sector tourism products – including attractions, activities, amenities and accommodations.
- c) Identify, designate and market **tourism development nodes** in consultation with stakeholders, municipalities and aboriginal peoples within provincial parks, public land use areas for recreation access and conservation areas.
- d) Engage with aboriginal peoples, complete **tourism opportunity assessments** for the Quarry of the Ancestors, Bitumount and Fort Chipewyan.
- e) Work with municipal governments and other partners to establish and promote a **scenic byways network** to showcase the region's unique scenic resources.

There is great potential for increased tourism and recreational development in the region, particularly in Lakeland Country. Lakeland boasts rich culture and heritage; tremendous tourism features including deep and clear lakes, sandy beaches, and a variety of fish and wildlife. It provides a full range of tourism settings with high value scenery and is poised to provide opportunities to many communities whose populations are growing, including Edmonton. Additional opportunities would reduce the amount of tourism and recreational investment lost to other jurisdictions and support economic diversification in the region. A competitive tourism industry and the availability of quality outdoor recreation opportunities depend on a sufficient supply of land where the integrity of attractive features, settings and scenery are maintained and long-term access is provided.

### Indicators:

- Visitation.
- Visitor expenditures.

## Energy, Mineral and Coal

### Objective:

- Opportunities for the responsible exploration, development and extraction of energy, mineral and coal resources are maintained.



### Strategies:

- a) Rules regarding **physical access to energy, mineral and coal resources** are clear to ensure economic development opportunities and environmental concerns are appropriately considered against other land uses.
- b) Policies are developed that **promote new investments** in energy, mineral and coal resource development.

While oil sands is the dominant energy industry in the region, continued natural gas development and mineral resource exploration, development and extraction, will contribute to the regional and provincial economy, supporting regional, provincial and international sources of supply. Maintaining a positive investment climate is critical to the success of these industries, and alignment of policy direction across regions will facilitate optimum access to these and other non-renewable resources.

Provincial legislation governing the energy and minerals sectors include the *Mines and Minerals Act*, the *Gas Resources Preservation Act*, the *Gas Utilities Act*, the *Freehold Minerals Tax Act*, the *Energy Resources Conservation Act*, the *Oil and Gas Conservation Act*, the *Coal Conservation Act*, the *Coal Sales Act*, the *Environmental Protection and Enhancement Act*, the *Water Act* and the *Public Lands Act*. Various other regulatory and non-regulatory requirements including policies, strategies and frameworks apply as well.

Supporting indicators for outcome

- Sectoral gross domestic product (GDP).
- Sectoral employment.

### Outcome 3:

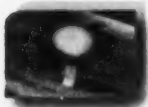
**Landscapes are managed to maintain ecosystem function and biodiversity**

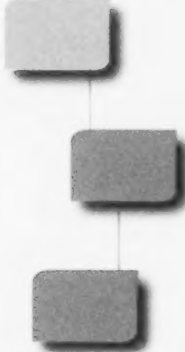
#### Objectives:

- Enhance the regional network of conservation areas to support biodiversity and ecosystem function.
- Regional biodiversity objectives are developed for various indicators of terrestrial and aquatic biodiversity in the region.
- Land disturbance impacts to biodiversity should be avoided or mitigated.
- Enhance the rate of reclamation and reduction of tailing ponds.

#### Strategies:

- a) Increase the amount of provincial Crown land under a **conservation designation**. (See Schedule A - LARP Digital map and Schedule B – LARP Land Use.)



- 
- b) Develop a **biodiversity management framework** for green area public land and provincial parks in the region by 2013. The framework will include:
- Identification of areas representative of the region's biodiversity (enhanced conservation area network);
  - Targets for regional biodiversity indicators, incorporating economic and social considerations;
  - Strategies to address caribou habitat needs, in accordance with provincial policy direction;
  - Strategies to maintain native vegetation, species, and landscape connectivity; and
  - Strategies to maintain aquatic ecosystem function and watercourse connectivity.
- c) Develop a **land disturbance plan** for public land in the Green Area for the Lower Athabasca Region by 2013. Features of the plan will include:
- Land disturbance limit(s) and pre-limit management triggers to address established biodiversity indicator targets in the biodiversity management framework. Setting of limits will involve stakeholders and integrate economic development and social needs. Limits will recognize that to meet economic outcomes, land disturbance is projected to increase substantially from current levels as oil sands are further developed.
  - A shift from a "voluntary" integrated land management approach by industrial and commercial operators contributing environmental footprint on public land, to "necessary" as a means to implement new disturbance limits. This means that best available ILM practices to reduce environmental footprint will be utilized, but the site-specific practices or tools to employ will not be prescribed. Co-ordinated, well-planned and well-managed industrial footprint is essential to this approach. Key ILM practices include:
    - Co-ordinated industry planning of major access corridors and associated development infrastructure on public land (i.e., camps, remote airstrips);
    - Progressive and timely reclamation of land not required for further in situ oil sands development;
    - Timely removal of linear disturbances; and
    - Locations and strategies for management of public motorized access.
  - Strategies for the Athabasca River Corridor north of Fort McMurray.
- d) Complete a **tailings management framework** to support effective management of tailings. This strategy will complement the existing Energy Resources Conservation Board Directive 074 to reduce the volume of mature fine tails present on oil sands facility sites.
- e) Implement the **progressive reclamation strategy** enhancing the suite of policies, strategies and reporting mechanisms used to drive progressive on-going reclamation of mining operations. The strategy includes an enhanced reclamation certification process, a transparent public reporting system for reclamation progress and a new progressive reclamation financial security program.

#### Indicators:

- Status of Alberta species, including species at risk.
- Area of land disturbance (by type) on public land in the region.
- Status of biodiversity indicator.
- Area of land retained in native vegetation.
- Area of oil sands reclamation.
- Volume of fluid tailings.

#### Outcome 4

#### Air and water are managed to support human and ecosystem needs

##### Air Quality

#### Objective:

- Releases from various sources are managed so they do not collectively result in unacceptable air quality.

#### Strategy:

- a. Implement the **Air Quality Management Framework for the Lower Athabasca Region**.

The ambient air quality limits and triggers in the framework are based on accepted Alberta ambient air quality objectives. If monitoring indicates that a trigger or limit has been reached, there will be a regional management response. The framework describes the kinds of management actions that may be required, such as the preparation of management plans (individual or collective), further modeling and/or monitoring, development and application of new performance standards and the use of best management practices. Taking action to manage air quality in the region will involve the provincial government and a number of parties including industry, municipalities and others. Finally, the framework establishes a commitment to ongoing monitoring, evaluation and reporting of ambient air quality conditions, and verification if triggers or limits are reached. This is described in more detail in the management framework.

The relevant legislation includes the *Environmental Protection and Enhancement Act*.

#### Indicators:

- Nitrogen dioxide (NO<sub>2</sub>).
- Sulphur dioxide (SO<sub>2</sub>).

#### Limits:

- Based on existing Alberta Ambient Air Quality Objectives. (See Schedule C for details.)



### Triggers:

- Based on existing Alberta Ambient Air Quality Objectives. (See Schedule C for details.)

### Groundwater

#### Objectives:

- Groundwater quality is protected from contamination by maintaining conditions within the range of natural variability and not exceeding established limits.
- Groundwater resources continue to support human and ecosystem needs, and the integrity of the regional flow system is maintained.

#### Strategy:

- a) Implement the **Groundwater Management Framework for the Lower Athabasca Region**.

The Groundwater Management Framework for the Lower Athabasca Region encompasses three areas: the north Athabasca oil sands, the south Athabasca oil sands and the Cold Lake-Beaver River area.

A set of indicators has been chosen based on the nature of the aquifers and potential impacts of both mining and in situ operations. The framework includes interim triggers and provides for the future establishment of risk-based limits. The trigger values will be finalized as more information becomes available.

Once triggers and limits have been finalized, if monitoring indicates that a trigger or limit has been reached, there will be a regional management response. The framework describes the kinds of management actions that may be required, such as the preparation of mitigation plans (individual or collective), further modeling or monitoring and the use of best management practices. Taking action to manage groundwater in the region will involve the provincial government and a number of parties including industry, municipalities and others. Finally, the framework establishes a commitment to ongoing monitoring, evaluation and reporting of regional groundwater conditions, and verification if triggers or limits are reached. This is described in more detail in the management framework.

The framework also requires preparation of facility groundwater management plans by industrial operators.

Relevant legislation includes the *Environmental Protection and Enhancement Act* and *Water Act*.

#### Indicators:

- **Quality:** Suite of primary and secondary indicators for mining and in situ. (See Schedule D for details.)
- **Quantity:** Change in groundwater surface elevation.

### Interim Triggers:

- Quality: Based on statistical deviation from baseline concentrations. (See Schedule D for details.)
- Quantity: Based on statistical deviation from baseline elevation.

### Surface Water Quality

#### Objective:

- Water quality in the Lower Athabasca River is managed so current and future water uses (protection of aquatic life, drinking water, recreation and aesthetics, agricultural and industrial) are protected.

#### Strategy:

- a) Implement the **Surface Water Quality Management Framework for the Lower Athabasca River.**

The surface water quality limits in the framework are based on provincially-used water quality guidelines. They were chosen to protect existing and future water uses (industrial, agricultural, recreational and esthetics, drinking water or protection of aquatic life).

If monitoring indicates that a trigger or limit has been reached, there will be a regional management response. The framework describes the kinds of management actions that may be required, such as the preparation of management plans (individual or collective), further modeling or monitoring and the use of best management practices. Taking action to manage surface water quality in the region will involve the provincial government and a number of parties including industry, municipalities and others. Finally, the framework establishes a commitment to ongoing monitoring, evaluation and reporting of ambient air quality conditions, and verification if triggers or limits are reached. This is described in more detail in the management framework.

Relevant legislation includes the *Environmental Protection and Enhancement Act*.

#### Indicators:

- Quality: Suite of indicators including 12 general and 29 metals. (See Schedule E for details.)

#### Limits:

- Quality: Established from existing provincially accepted water quality guidelines where applicable, further risk based limits to be developed. (See Schedule E for details.)
- Apply at Old Fort Long Term Monitoring Station.

#### Triggers:

- Quality: Based on statistical deviation from historical ambient concentrations. (See Schedule E for details.)
- Apply at Old Fort Long Term Monitoring Station.





## Surface Water Quantity

### Strategy:

- a) Complete an updated **surface water quantity management framework** for the Lower Athabasca River.

The Government of Alberta is committed to completing an update of the phase I Water Management Framework for the Lower Athabasca River. The current framework provides guidance for management of water withdrawals by the oil sands mining industry. This phase I management framework was approved by Alberta Environment and the federal department of Fisheries and Oceans in 2007. Work is continuing to update this water quantity management framework.

### Outcome 5:

**Infrastructure development supports economic and population growth**

### Objective:

- The region's infrastructure and land base available for development are planned to facilitate population and economic growth.

### Strategies:

- a) Use the **Comprehensive Regional Infrastructure Sustainability Plan (CRISP)** process to augment and facilitate the planning in the region where oil sands development will create rapid growth and significant development pressures.

The rapid rate of growth in the Lower Athabasca Region is expected to continue for the foreseeable future. A proactive approach to planning for infrastructure and urban growth is needed to ensure that the region is an attractive place to live and do business. The investment and work on oil sands projects begins years in advance of the first production. This planning process should focus on anticipated investment and population growth.

The CRISP process represents a new long-term and collaborative approach to planning infrastructure in Alberta's oil sands areas. Each plan will establish a long-term blueprint for future infrastructure development based on possible future oil sands production rates and associated population growth, and will enhance the way provincial and municipal governments work and plan together. CRISP will inform the province's capital planning process, which considers overall provincial priorities in addition to regional needs.

CRISP will identify what infrastructure will be needed based on incremental population growth and oil sands production levels to a maximum of six million barrels per day (the estimated amount that potentially could be reached by the year 2045), and will recommend the sequence in which the infrastructure should be developed.

#### Indicators:

- Oil sands projects: current, approved and pending.
- Regional population.
- Camp population counts.
- Traffic counts.
- Cost of construction.
- Cost of living.
- Rental affordability.

#### Outcome 6:

The quality of life of residents is enhanced through increased opportunities for recreation and active living

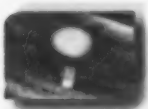
#### Objective:

- Provide a wide range of recreation and tourism opportunities that meet the preferences of regional residents and visitors.

#### Strategies:

- a) Designate **new provincial recreation areas** to address growing demand for recreational opportunities in the region and provide a secure landbase to support tourism development (e.g., serviced and un-serviced campgrounds, day-use areas, boat launches, motorized staging areas, designated motorized and non-motorized trails, private sector lodges and developments). (See Schedule A – LARP Digital Map, see Schedule B – LARP Land Use.)
- b) Designate **public land areas for recreation and tourism** in the region that contain unique features or settings to address the growing demand for recreational opportunities in the region and provide an attractive land base for tourism investment. (See Schedule A – LARP Digital map, see Schedule B – LARP Land Use.)
- c) In collaboration with partners, co-ordinate the development of a **regional trail system plan** to designate trails, routes and areas which link communities, destinations and other jurisdictions with the region's parks and open spaces. (See Schedule G for plan details.)
- d) **Collect regional data** including the completion of a recreation and tourism resource inventory, a scenic resource assessment inventory and a regional recreational demand and satisfaction survey. Data collected will inform recreational planning and priority infrastructure development on provincial Crown land.

A growing, prosperous and mobile population is changing the type of experiences people are looking for and putting more pressure on the land. More people are seeking outdoor recreational opportunities such as camping, picnic and day-use areas or trail-based recreation. In addition to identifying Lakeland Country as an iconic tourism destination, there is a significant need for diverse



recreation opportunities close to urban centres such as Fort McMurray. Ongoing monitoring of regional recreation needs (i.e., regional recreation demand and satisfaction survey) is required to ensure all partners can better respond to local needs.

#### Indicators:

- Satisfaction with recreational opportunities within the region.
- Area/capita of parks or designated open space for recreation (provincial and municipal).
- Recreation infrastructure such as number of campsites and kilometers of designated trails.

#### Outcome 7:

##### Inclusion of aboriginal peoples in land-use planning

#### Objective:

- To encourage aboriginal peoples' participation in land-use planning and decision-making. This will provide both aboriginal communities and the Government of Alberta with a basis for better addressing current and potential land-use conflicts, in a manner supportive of aboriginal traditional uses, such as the exercise of treaty rights.

#### Strategies:

- a) Invite First Nations expressing an interest in the Richardson Backcountry to be involved in a sub-regional initiative called the **First Nations-Richardson Backcountry Stewardship and Tourism Initiative** (Richardson Initiative). The initiative would consider:
  - Fish and wildlife management, access management, and economic/business opportunity.
- b) The Government of Alberta will continue to **consult with aboriginal peoples** in a meaningful way when government decisions may adversely affect the continued exercise of their constitutionally protected rights, and the input from such consultations continues to be reviewed prior to the decision.

#### Indicators:

- Participation rate of First Nations in the sub-regional initiative.
- Aboriginal peoples continue to be consulted when Government of Alberta decisions may adversely affect the continued exercise of their constitutionally protected rights, and the input from such consultations continues to be reviewed prior to the decision.

## Monitoring, Evaluation and Reporting

Monitoring, evaluation and reporting are key activities for the success of the Lower Athabasca Regional Plan. To respond effectively to changing circumstances and new information, government must have a way to assess regional planning progress on objectives and outcomes, and initiate corrective action where required. A system of monitoring, evaluation, reporting and improvement is needed to determine the effectiveness of the regional plan (i.e., to determine if land-use strategies and actions will fulfill the regional plans' objectives and outcomes).

### Monitoring

On an ongoing basis, government will systematically collect and store data for indicators about the progress on the Lower Athabasca Regional Plan outcomes. The indicators identified in Table 1 show the broad economic, environmental and social outcomes desired for the region. Government will be responsible for collecting data for these indicators over the span of the regional plan, and for monitoring the data trends showing changes occurring in the region.

### Evaluation

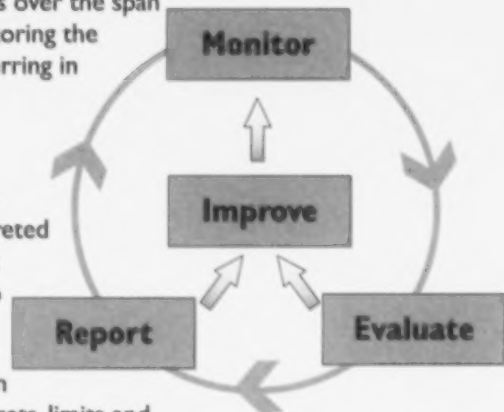
The monitoring data will undergo rigorous evaluation and be interpreted within the context of government policies and strategies designed to achieve the regional objectives.

This includes ministerial evaluation of monitoring data against the targets, limits and thresholds established for the region. Wherever possible, the contributions of subject matter experts within the stakeholder community will be encouraged as input into this process.

### Reporting

Government will use various mechanisms to formally communicate on regional plan progress to the public, including the release of formal reports that speak directly to the plan, as well as ministry communications that address more specific aspects of the plan. Government websites like the *Land-use Framework* website ([www.landuse.alberta.ca](http://www.landuse.alberta.ca)) and ministry websites will also be sources for monitoring information and progress updates related to the LARP.

At least once every five years, an audit committee will be appointed to determine if regional objectives and audit policies are meeting the purposes of the *Alberta Land Stewardship Act* (ALSA); the committee will make a public report to the Stewardship Minister. At least once every 10 years, a comprehensive review of the plan and a report on its effectiveness will be initiated by the Land Use Secretariat and submitted to the Stewardship Minister. This review may result in the plan being amended or repealed.



## Improving

This on-going cycle of monitoring, evaluating and reporting encourages continuous improvements and adaptation in decision-making and actions, so current and future generations achieve the balance desired between economic, environmental and social outcomes in the Lower Athabasca Region.





**Table 1**  
**Regional Outcomes and Supporting Indicators**

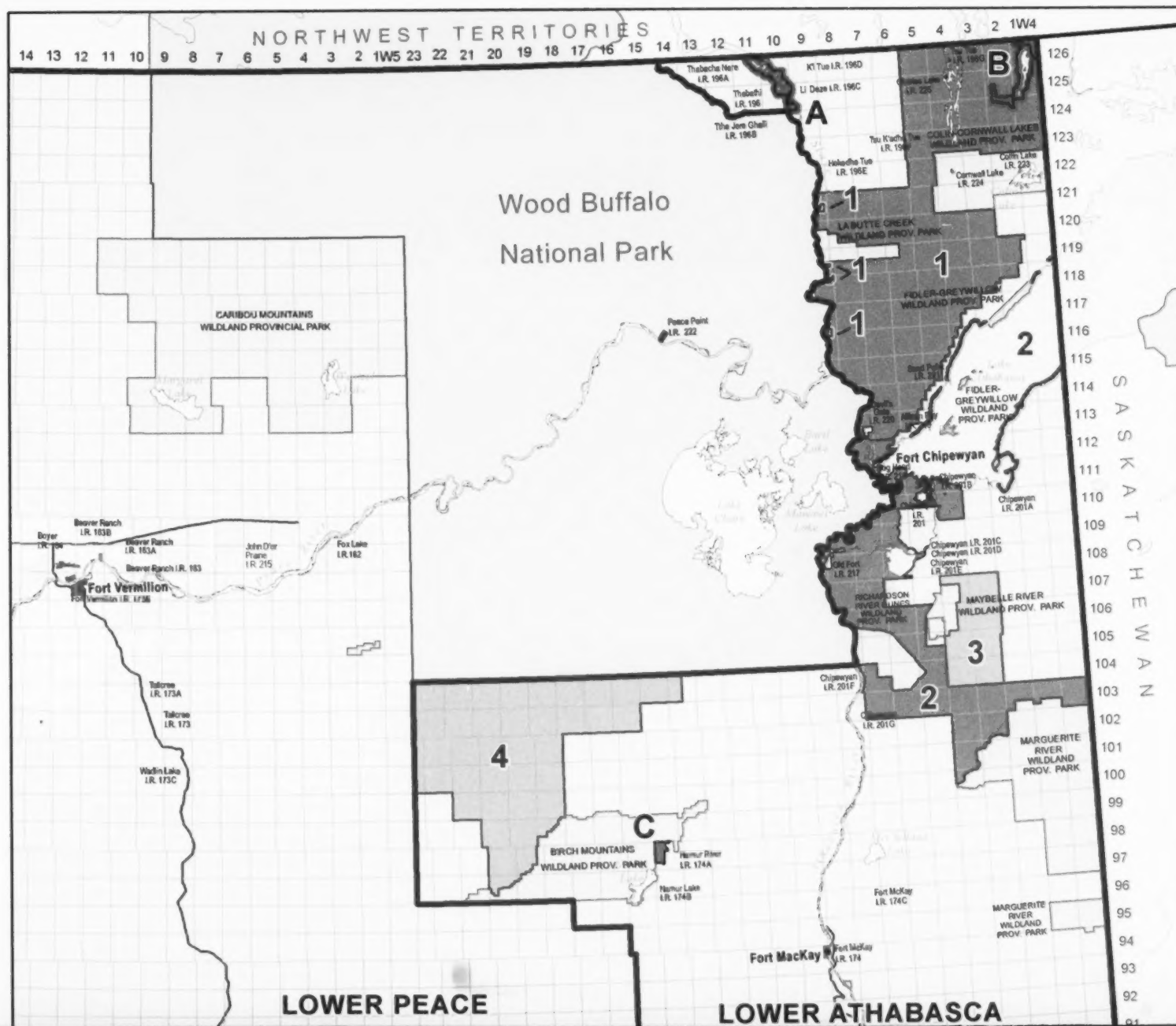
Provincial and Regional Outcomes	Supporting Indicators	Lead Ministry
<b>Healthy economy supported by our land and natural resources</b>		
1 The economic potential of the oil sands resource is optimized	Regional labour force by sector..... Provincial royalties..... Personal income..... Bitumen production rate..... Investment and capital stock..... Cost of production.....	Finance and Enterprise Finance and Enterprise Finance and Enterprise Energy Finance and Enterprise Finance and Enterprise
2 The region's economy is diversified	Sectoral GDP..... Sectoral employment..... Area of public land actively managed..... for intensive forestry Area of land disturbance on..... productive land base on public land in the region Fragmentation and conversion of..... agricultural land to non-agricultural land uses Tourism visitation..... Tourism visitor expenditures.....	Finance and Enterprise Finance and Enterprise Sustainable Resource Development Sustainable Resource Development Agriculture and Rural Development Tourism, Parks and Recreation Tourism, Parks and Recreation
<b>Healthy ecosystems and environment</b>		
3 Landscapes are managed to maintain ecosystem function and biodiversity	Status of Alberta species, including..... Area of land disturbance (by type) on..... public land in the region Status of biodiversity indicators..... Area of land retained in native..... vegetation Area of oil sands reclamation..... Volume of fluid tailings.....	Sustainable Resource Development Sustainable Resource Development Sustainable Resource Development Sustainable Resource Development Environment Environment
4 Air and water are managed to support human and ecosystem needs	See Schedules C- E.....	Environment
<b>People-friendly communities with ample recreational and cultural opportunities</b>		
5 Infrastructure development supports economic and population growth	Oil sands projects: current/approved/ ..... pending Regional population..... Camp population counts..... Traffic counts..... Cost of construction..... Cost of living..... Rental affordability.....	Energy Treasury Board Treasury Board Treasury Board Treasury Board Treasury Board Treasury Board

Provincial and Regional Outcomes	Supporting Indicators	Lead Ministry
<b>People-friendly communities with ample recreational and cultural opportunities - cont'd</b>		
6 The quality of life of residents is enhanced through increased opportunities for recreation and active living	Satisfaction with recreational.....	Tourism, Parks and Recreation
	opportunities within the region	
	Area/capita of parks or designated.....	Tourism, Parks and Recreation
	open space for recreation (provincial and municipal)	
	Recreation infrastructure such as.....	Tourism, Parks and Recreation
	number of campsites, kilometres of designated trails	
7 Inclusion of aboriginal peoples in land-use planning	Participation rate of First Nations in ..... the sub-regional initiative	Sustainable Resource Development/ Tourism, Parks and Recreation/ Environment
	Aboriginal peoples continue to be ..... consulted when Government of Alberta decisions may adversely affect the continued exercise of their constitutionally protected rights, and the input from such consultations continues to be reviewed prior to the decision	Sustainable Resource Development/ Tourism, Parks and Recreation/ Environment

**Table 2**  
**Regional Outcomes and Strategies**

Provincial and Regional Outcomes	Strategies	Lead Ministry	Timeline
<b>Healthy economy supported by our land and natural resources</b>			
The economic potential of the oil sands resource is optimized	Alberta Provincial Energy Strategy.....	Energy/	Ongoing
	Responsible Actions: A Plan for.....	Treasury Board	Ongoing
	Alberta's Oil Sands		
	Improved regulatory process.....	Energy/Sustainable Resource Development/ Environment/	Ongoing
	Building and Educating.....	Employment and Immigration	Ongoing
	Tomorrow's Workforce and Strategy for Alberta's Energy Sector		
The region's economy is diversified	Aboriginal Development Initiative .....	Employment and Immigration	Ongoing
	Economic linkages to markets.....	Transportation/Finance and Enterprise	Ongoing
	Integrated land management.....	Sustainable Resource Development	Ongoing
	Intensively manage forest stands..... and regeneration	Sustainable Resource Development	Ongoing
	Lakeland Country Iconic Tourism .....	Tourism, Parks and Recreation	2015
	Destination Plan		
	Enhance and expand the supply of .....	Tourism, Parks and Recreation	Ongoing
	tourism products		
	Tourism development nodes.....	Tourism, Parks and Recreation	2015
	Tourism opportunity assessments .....	Tourism, Parks and Recreation/Culture and Community Spirit	2015
	for Quarry of the Ancestors, Bitumount and Fort Chipewyan		
	Scenic byways network		2015
	Clarity in rules for physical access.....	Energy	Ongoing
	to energy, mineral and coal resources		
	Promote new investment in energy, .....	Energy	Ongoing
	mineral and coal resource development		
<b>Healthy ecosystems and environment</b>			
Landscapes are managed to maintain ecosystem function and biodiversity	Designated conservation areas .....	Sustainable Resource Development/Tourism, Parks and Recreation	2011
	established		
	Develop a biodiversity management .....	Sustainable Resource Development	2013
	framework for public lands		
	Develop a land disturbance plan for .....	Sustainable Resource Development	2013
	public lands		
	Complete a tailings management .....	Environment	2012
	framework		
	Implement a progressive .....	Environment	Ongoing
	reclamation strategy		



Provincial and Regional Outcomes	Strategies	Lead Ministry	Timeline
<b>Healthy ecosystems and environment - cont'd</b>			
Air and water are managed to support human and ecosystem needs	Implement the Air Quality ..... Management Framework for the Lower Athabasca Region	Environment	Ongoing
	Implement the Groundwater ..... Management Framework for the Lower Athabasca Region	Environment	Ongoing
	Implement the Surface Water ..... Quality Management Framework for the Lower Athabasca River	Environment	Ongoing
	Complete and update surface ..... water quantity management framework for the Lower Athabasca River	Environment	2012
<b>People-friendly communities with ample recreational and cultural opportunities</b>			
Infrastructure development supports economic and population growth	Use CRISP to augment and facilitate ..... planning where oil sands development causes growth pressures	Treasury Board	Ongoing
The quality of life of residents is enhanced through increased opportunities for recreation and active living	Designate new provincial recreation ..... areas to address growing demand for recreational opportunities	Tourism, Parks and Recreation	2013
	Designate public land areas for ..... recreation and tourism that contain unique features or settings	Tourism, Parks and Recreation/Sustainable Resource Development	2011
	Develop a regional trail system .....	Tourism, Parks and Recreation	Ongoing
	Collect regional data including ..... completion of recreation and tourism inventory, a scenic resource assessment inventory and a regional recreational demand and satisfaction survey.	Tourism, Parks and Recreation	Ongoing
Aboriginal peoples are included in land-use planning	Invite First Nations expressing an ..... interest in the Richardson Backcountry to be involved in a sub-regional initiative called the First Nations-Richardson Backcountry Stewardship and Tourism Initiative	Sustainable Resource Development/Tourism, Parks and Recreation/Aboriginal Relations	Ongoing
	Continue to consult with aboriginal ..... peoples in a meaningful way when government decisions may adversely affect the continued exercise of their constitutionally protected rights.	Government	Ongoing








# Proposed Conservation and Recreation/Tourism Areas in the Lower Athabasca Region

## Conservation Areas

-  Provincial Parks
  - 1 Canadian Shield Wildland Park
  - 2 Richardson Wildland Park
  - 3 Gipsy - Gordon Wildland Park
-  Public Land-use Zones
  - 4 Birch River Conservation Area
  - 5 Dillon River Conservation Area

## Areas for Recreation/Tourism Development

-  Provincial Recreation Areas
  - A Slave River, Cassette, Mountain & Pelican Rapids
  - B Andrew Lake
  - C Gardiner Lakes
  - D Gregoire/Willow Lake Expansion
  - E Christina Crossing
  - F Cowper Lake
  - G Crow Lake Expansion
  - H Steepbank Lake Complex
  - I Clyde/Wiau Lake Complex
  - J Winefred/Grist/Kirby Lakes
-  Public Land Areas for Recreation/Tourism
  - 1 Slave River South
  - 2 Lake Athabasca
  - 3 Richardson
  - 4 Athabasca River
  - 5 Clearwater River
  - 6 House River
-  Lakeland Country Iconic Tourism Destination

## Base Data

- |  |   |
|--|---|
|  Land-use Framework Regional Boundary  |  First Nations Reserves |
|  Green Area                           |  Métis Settlement      |
|  White Area                           |  Military Reserve      |
|  Provincial Parks and Protected Areas |  Hydrography           |
|  National Park                        |  Provincial Roads      |
|  Municipality                         |  Population Centers    |

SOURCE INFORMATION  
Conservation Areas: Alberta Sustainable Resource and Alberta Tourism Parks  
Areas for Recreation/Tourism Development: Alberta Tourism Parks and Recreation and  
Alberta Sustainable Resource  
Provincial Parks & Protected Areas: Alberta Tourism Parks and Recreation  
Base Map Data: Provided by Spatial Data Warehouse Ltd.  
Spatial Data: Courtesy of Alberta, Natural Resources Canada (GeoGratis)  
First Nations Parks & Protected Areas: Information Services Corporation of Saskatchewan

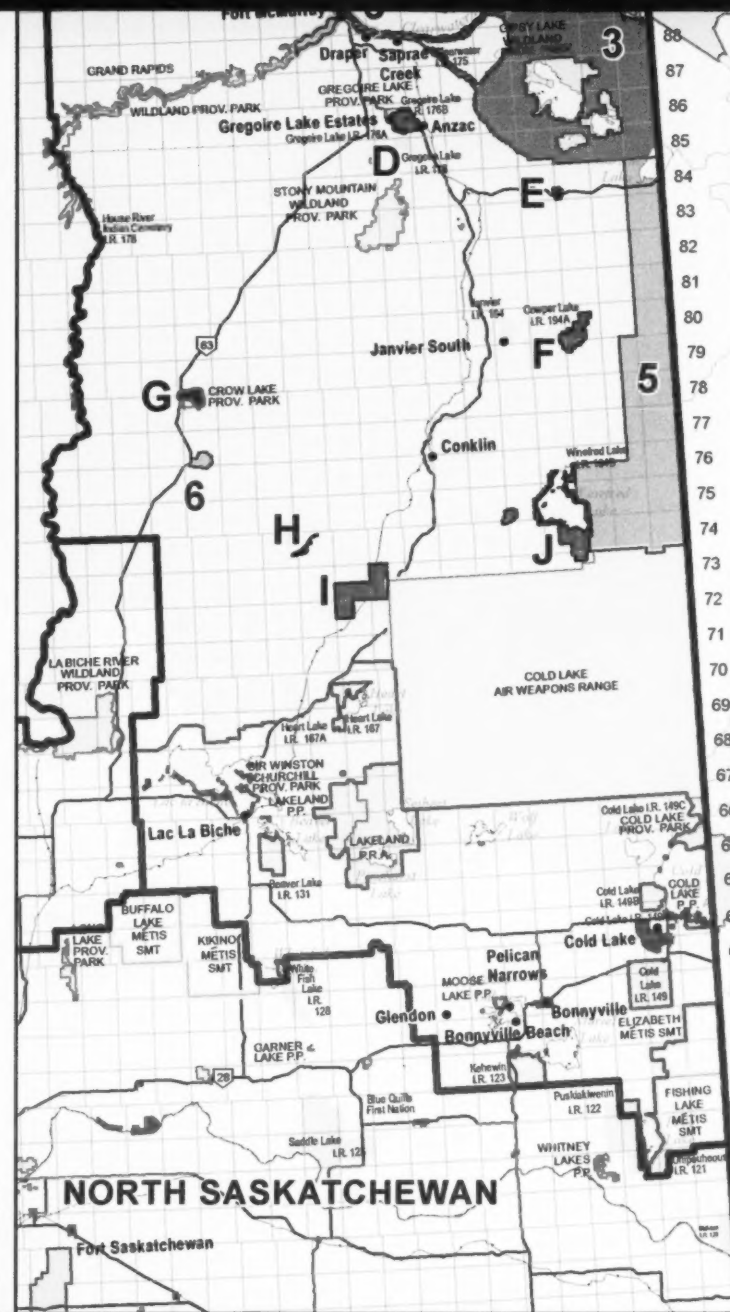
DISCLAIMER:  
These materials are provided "as is" without warranties, conditions of any kind either expressed or implied as to the information as depicted is subject to change. The Government of  
Alberta assumes no responsibility for discrepancies at time of use. The Crown is not liable for any claims, costs, losses,  
or damages, including any special, indirect, incidental or consequential loss or damage, which the user may incur or experience as a result of the use or possession of the information.



Transverse Mercator Projection (NAD83)  
North American Datum 1983 (NAD83)



Published Date: March 28, 2011  
Active: 10/01/2011



### Schedule B: LARP Land Uses

## New Conservation Areas

[illegible]

# Existing Conservation Areas

	Area Name	Area Size (ha)	Per Cent of the Region (9,321,247 ha)	Legal Designation	Permitted Uses								
					Petroleum and Natural Gas (PNG) (Honouring Existing Commitments Note 1)	Oil Sands, Metallic and Industrial Minerals, and Coal	New PNG No New Surface Access	Forestry	Grazing	Recreation Opportunity (Note 3)	Motorized Recreation on Designated Trails Only	Hunting, Fishing, Trapping	Multi-use Corridors
	La Butte Creek	18,147	0.19	Wildland Provincial Park	✓	X	✓	X	X	Primitive	✓	✓	X
	Colin-Cornall Lakes	70,428	0.76	Wildland Provincial Park	✓	X	✓	X	X	Primitive	✓	✓	X
	Fidler-Greywillow	6,521	0.07	Wildland Provincial Park	✓	X	✓	X	X	Primitive	✓	✓	X
	Maybelle River	15,308	0.16	Wildland Provincial Park	✓	X	✓	X	X	Primitive	✓	✓	X
	Richardson Dune	32,033	0.34	Wildland Provincial Park	✓	X	✓	X	X	Primitive	✓	✓	X
	Birch Mountains	144,505	1.55	Wildland Provincial Park	✓	X	✓	X	X	Primitive	Snow vehicle on designated trails	✓	X
	Marguerite River	196,302	2.11	Wildland Provincial Park	✓	X	✓	X	X	Primitive	✓	✓	X
	Whitemud Falls	3,848	0.04	Wildland Provincial Park	✓	X	✓	X	X	Primitive	✓	✓	X
	Gipsy Lake	35,766	0.38	Wildland Provincial Park	✓	X	✓	X	X	Primitive	✓	✓	X
	Stony Mountain	13,326	0.14	Wildland Provincial Park	✓	✓	✓	X	X	Primitive	✓	✓	X
	Grand Rapids	26,332	0.28	Wildland Provincial Park	✓	X	✓	X	X	Primitive	✓	✓	X
	Athabasca Duns	3,770	0.04	Ecological Reserve	X	X	X	X	X	Primitive - foot access only	X	X	X
	Crow Lake	938	0.005	Ecological Reserve	X	X	X	X	X	Primitive - foot access only	X	X	X
	Egg Island	0.36	0.00	Ecological Reserve	X	X	X	X	X	Primitive - foot access only	X	X	X
	Whitemud Falls	865	0.01	Ecological Reserve	X	X	X	X	X	Primitive	X	X	X

Total 568,089 6.09

### New Provincial Recreation Areas

[illegible]

### Existing Provincial Parks for Recreation (Provincial Parks)

	Area Name	Area Size (ha)	Per Cent of the Region (9,321,247 ha)	Legal Designation	Permitted Uses								
					Petroleum and Natural Gas (PNG) (Honouring Existing Commitments)	Oil Sands, Metallic and Industrial Minerals, and Coal	New PNG No New Surface Access	Forestry	Grazing	Recreation Opportunity	Motorized Recreation	Hunting, Fishing, Trapping	Multi-use Corridors
	Lakeland	59,030	0.63	Provincial Park and Provincial Recreation Area	✓	X	✓	X	✓	Front country	On designated trails only	✓ (in provincial recreation area on designated trails)	X
	Sir Winston Churchill	662	0.01	Provincial Park	✓	X	✓	X	✓	Front country	X	X	X
	Cold Lake	5,849	0.06	Provincial Park	✓	X	✓	X	✓	Front country	X	X	X
	Moose Lake	734	0.01	Provincial Park	✓	X	✓	X	✓	Front country	X	X	X
	Gregoire Lake	735	0.01	Provincial Park	✓	X	✓	X	✓	Front country	X	X	X
	Crow Lake	696	0.01	Provincial Park	✓	X	✓	X	✓	Front country	X	X	X
	Garner Orchid Fen	166	0.002	Natural Area	✓	✓	✓	X	✓	Front country	✓	✓	✓
	La Saline	292	0.003	Natural Area	✓	✓	✓	X	✓	Front country	✓	✓	✓
	Total	68,164	0.73										



## New – Public Land Areas for Recreation and Tourism

[illegible]

### Green Area - Mixed-use

Area Size (ha)	Per Cent of the Region (9,321,247 ha)		Permitted Uses on Public Lands								
			Existing Petroleum and Natural Gas	Existing Oil Sands, Metallic and Industrial Minerals, and Coal	New Energy and Mineral Tenure	Forestry	Grazing	Tourism and Recreation	Motorized Access	Hunting, Fishing, Trapping	Multi-use Corridors
5,423,417	58.18		✓	✓	✓	✓	✓	✓ For grazing leases permission of lease holder is required for recreational access	✓	✓	✓

### White Area - Settled

Area Size (ha)	Per Cent of the Region (9,321,247 ha)		Permitted Uses on Public Lands								
			Existing Petroleum and Natural Gas	Existing Oil Sands, Metallic and Industrial Minerals, and Coal	New Energy and Mineral Tenure	Forestry	Grazing	Tourism and Recreation	Motorized Access	Hunting, Fishing, Trapping	Multi-use Corridors
672,220	7.21		✓	✓	✓	✓	✓	✓ For grazing leases permission of lease holder is required for recreational access	✓ For grazing leases permission of lease holder is required for recreational access	✓	✓

**Private Lands** - Private landowners make decisions about how to use and manage their land consistent with existing provincial and municipal legislation - the Lower Athabasca Regional Plan does not change this or alter private property rights.

Approximately 10 per cent of the region include the Cold Lake Air Weapons Range, First Nations Reserve, Métis Settlement and Lake Athabasca.

#### **Note 1:**

#### **Existing Petroleum and Natural Gas in Conservation Areas and Provincial Parks for Recreation**

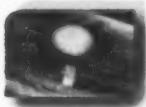
Existing petroleum and natural gas tenure and development will be honoured in conservation areas and provincial parks for recreation in accordance with Information Letter 2003-25, *Honouring Existing Mineral Commitments in Legislative Provincial Protected Areas*. There is precedent in Alberta where exploration and development of conventional petroleum and natural gas occurs in legislated protected areas. The environmental footprint associated with this type of development is significantly less than for oil sands and metallic and industrial mineral development activities.

- This includes all subsurface and surface activities needed to explore for, develop and extract the resource defined in the existing agreement. Care must be taken when exploring, developing and extracting the resource in order to minimize impacts of activities on the natural landscape, wildlife, fish and vegetation.
- This also includes renewing subsurface and surface dispositions, approvals and agreements for existing activities.
- Applications for **new surface dispositions** (e.g., a new disposition for a well, road, pipeline, facility, etc.) required to access an existing subsurface commitment would also be honoured as necessary extensions to an existing commitment, subject to review through the current application and approval process.
- Applications for **seismic programs** associated with existing subsurface commitments will be reviewed through the current application and approval process.
- Limitations: Existing surface or subsurface commitments related to petroleum and natural gas within a protected area cannot be used as a basis to access new subsurface rights within a protected area (e.g., whether to access new subsurface deeper rights, new lateral subsurface rights, or additional new rights). By definition, any new subsurface disposition or subsurface right does not qualify as an existing commitment as it came into effect after the protected area was established.

#### **Note 2:**

#### **Ecosystem Forestry**

Low impact forest practices with the primary goal being protection and maintenance of biodiversity and ecosystem function (not commercial timber production). Practices include winter-only operations, leaving behind significant areas of forest undisturbed and timber harvest patterns that follow historical wildfire patterns. Sometimes referred to as "natural disturbance-based" forest management. To meet international guidelines for protected areas, there is a category that allows for up to one-third of the area to be managed in natural disturbance-based forest management.



### **Note 3:**

#### **Recreation Opportunities:**

**Primitive** – typically large and essentially un-modified natural landscapes with no recreation or tourism infrastructure and limited evidence and interaction with other visitors and management controls. The area is typically inaccessible by motorized vehicles – minimal air access may occur. Visitors experience solitude, isolation from human civilization, risk and personal challenge.

**Backcountry** – generally un-modified natural landscapes with minimal to no recreation or tourism infrastructure and limited evidence and interaction with other visitors. The area is closer to roads but typically inaccessible by motorized vehicles — minimal air access may occur. Visitors experience solitude, closeness to nature, risk and personal challenge.

**Mid-country** – a natural appearing landscape. Recreation and tourism infrastructure is the minimum necessary to facilitate the recreation and tourism activities and mitigate environmental impacts and conflicts. Evidence and interaction with other visitors exist, but is subtle. The area is accessible by motorized vehicles via primitive roads and trails and supports motorized and non-motorized recreation and tourism activities. Visitors can experience some isolation from civilization, interaction with the nature and a moderate degree of risk and personal challenge.

**Front-country** – mostly natural-appearing landscapes with obvious human modifications that harmonize with the surroundings. Recreation and tourism infrastructure and management controls are obvious. The area is easily accessible and evidence and interaction with other visitors is common. Motorized and non-motorized activities occur. Opportunities to experience solitude are rare.

**Developed** – a substantially modified landscape with obvious development and resource use. Recreation and tourism infrastructure and management controls are common and desired. Evidence and interaction with other visitors is frequent and desired. The visitor experiences some modern conveniences and a feeling of security from personal risk.

**Highly Developed** - a landscape that is dominated by human modifications and use. Recreation and tourism infrastructure and management controls are extensive, elaborate and desired. Large numbers of users are expected and the sights and sounds of others dominate. The visitor experiences numerous modern conveniences, interaction with manicured environments and a feeling of high personal security.

**Schedule C:**  
**Air Quality Management Framework Limits and Triggers**

**Table C-1. Annual Ambient Air Quality Triggers and Limits for NO<sub>2</sub> and SO<sub>2</sub>**

Level	Description	NO <sub>2</sub>	SO <sub>2</sub>
4	Ambient Air Quality Limit	45 µg/m <sup>3</sup> 24 ppb	20 µg/m <sup>3</sup> 8 ppb
3	Ambient Air Quality Trigger for Level 3	30 µg/m <sup>3</sup> 16 ppb	13 µg/m <sup>3</sup> 5 ppb
2	Ambient Air Quality Trigger for Level 2	15 µg/m <sup>3</sup> 8 ppb	8 µg/m <sup>3</sup> 3 ppb

**Table C-2. Ambient Air Quality Triggers Based on 99<sup>th</sup> Percentile of the Hourly Data Over a Year**

Trigger	NO <sub>2</sub>	SO <sub>2</sub>
4	176 µg/m <sup>3</sup> (92 ppb)	94 µg/m <sup>3</sup> (36 ppb)
3	118 µg/m <sup>3</sup> (62 ppb)	63 µg/m <sup>3</sup> (24 ppb)
2	57 µg/m <sup>3</sup> (30 ppb)	31 µg/m <sup>3</sup> (12 ppb)

Note: The NO<sub>2</sub> triggers and limits reflect the proposed revisions to the Alberta Ambient Air Quality Objectives for NO<sub>2</sub> that are anticipated to take effect in 2011.



# Schedule D:

## Groundwater Management Framework Interim Quality Triggers

**Table D-1. Interim Groundwater Quality Triggers for the North Athabasca Oil Sands Area**

Interval	TDS	Na	Cl	SO <sub>4</sub>	NH <sub>4</sub>	As	Si	NAs
Surficial deposits	600	50	20	50	1	0.003	10	2
Buried channels	1,000	150	50	250	1	0.003	10	3
Basal McMurray AMU1	1,000	200	250	400	2	0.003	10	5
Basal McMurray AMU2	3,700	1,000	1,100	400	2	0.003	10	20

**Table D-2. Interim Groundwater Quality Triggers for the South Athabasca Oil Sands Area**

Interval	Temperature	Temperature	TDS	Cl	Si	As	B	NO <sub>3</sub>	BTEX	Phenols
Surficial deposits	5°C change		600	50	10	0.003	0.2	0.05	<10% DF	0.005
Buried channels	2°C change		1,000	100	10	0.003	0.4	0.01	<10% DF	0.005
Grand Rapids Formation	2°C change		2,000	1,000	10	0.003	1.0	0.01	<10% DF	0.010
Clearwater Formation	2°C change		3,500	1,000	10	0.003	1.5	0.01	<10% DF	0.010
McMurray Formation	2°C change		3,500	1,500	10	0.003	2.0	0.01	<10% DF	0.010

Note: the Grand Rapids, Clearwater and McMurray aquifers are saline in some of the south Athabasca oil sands areas.

**Table D-3. Interim Groundwater Quality Triggers for the Cold Lake-Beaver River Area**

Regional Aquifer	Temperature	TDS	Cl	As	Phenols	PHC FI	NO <sub>3</sub> as N	NH <sub>4</sub> as N
Sand River Formation	2°C change	500	25	0.003	0.009	0.2	2.0	1
Ethel Lake Formation	2°C change	500	25	0.003	0.009	0.2	0.5	1
Bonnyville Formation Sand I	2°C change	500	125	0.003	0.009	0.4	0.2	1
Muriel Lake Formation	2°C change	500	125	0.006	0.009	0.4	0.2	1
Empress Formation Unit 3	2°C change	500	200	0.003	0.006	0.4	0.1	1
Empress Formation Unit I	2°C change	500	100	0.003	0.004	0.4	0.1	1

### Note:

Concentrations are shown in mg/L

AMU = aquifer management unit

TDS = total dissolved solids

Na = sodium

Cl = chloride

SO<sub>4</sub> = sulphate

NH<sub>4</sub> = ammonium

As = arsenic

NH<sub>4</sub> as N = ammonium as nitrogen

Si = silica

NAs = naphthenic acids

B = boron

NO<sub>3</sub> = nitrate

BTEX = benzene, toluene, ethylbenzene and total xylenes.

FI = fluoride

DF = detection frequency

PHC = petroleum hydrocarbons (fraction 1)

**Schedule E:**  
**Surface Water Quality Management Framework Limits and Triggers**

**Table E-1. Water Quality Triggers and Limits for the Lower Athabasca River - General Indicators**

General Indicator	Water Quality Triggers		Water Quality Limit
	Mean	Peak	
Calcium ( $\text{Ca}^{2+}$ )	34.7	48.8	1,000 <sup>c</sup>
Chloride ( $\text{Cl}^-$ )	20.2	45.0	100 <sup>c</sup>
Magnesium ( $\text{Mg}^{2+}$ )	9.5	13.6	-
Potassium ( $\text{K}^+$ )	1.4	2.1	-
Sodium ( $\text{Na}^+$ )	21.4	43.7	-
Sulphate ( $\text{SO}_4^{2-}$ )	26.7	41.2	500 <sup>d</sup>
Total Dissolved Phosphorus (TDP)	0.016	0.032	-
Total Phosphorus (TP)	0.073	0.259	0.05 <sup>a</sup>
Nitrate ( $\text{NO}_3\text{-N}$ )	0.092	0.264	2.935 <sup>b</sup>
Total Ammonia ( $\text{NH}_3\text{-N}$ )	0.05	0.12	Varies with pH and temperature
Total Nitrogen (TN)	0.590	1.039	1.00 <sup>a</sup>

Triggers and limits apply at Old Fort Long Term Monitoring Station.

Orange shading indicates the guideline is lower than historical data (1988-2009) for that indicator; orange shaded values are not limits, but eventually appropriate limits will be developed for those indicators. Blue shading indicates the absence of a guideline.

All values are in mg/L.

a Alberta Guidelines for the Protection of Freshwater Aquatic Life

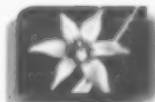
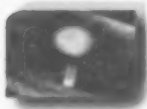
b CCME Guidelines for the Protection of Aquatic Life

c CCME Guidelines for the Protection of Agricultural Water Uses

d The Guidelines for Canadian Drinking Water Quality

e U.S. EPA Aquatic Life Criteria

f Fish early life stages present; chronic criterion ( $\text{CCC}$ ) =  $((0.0577/(1 + 10^{7.600 - \text{pH}})) + (2.487/(1 + 10^{4.7600 - \text{pH}}))) \times \text{MIN}(2.85, 1.45 \cdot 10^{0.020(25 - T)})$ . See Table A3 in the framework for computed temperature and pH-dependent total ammonia values.



**Table E-2. Water Quality Triggers and Limits for the Lower Athabasca River - Metal Indicators**

Metal Indicator	Water Quality Triggers		Water Quality Limit
	Mean	Peak	
Aluminum T	1479	6366	5 or 100 <sup>a,1</sup>
Aluminum D	15	48	-
Antimony T	0.148	0.377	6 <sup>d,2,3</sup>
Antimony D	0.106	0.202	-
Arsenic T	1.1	2.5	5 <sup>b</sup>
Arsenic D	0.5	0.7	-
Barium T	78.3	146.0	1,000 <sup>d</sup>
Barium D	52.5	72.3	-
Beryllium T	0.074	0.268	100 <sup>c,4</sup>
Bismuth T	0.0166	0.0555	-
Boron T	47	65	500 <sup>c</sup>
Boron D	26	40	-
Cadmium T	0.3	1.0	Varies with hardness <sup>a,5</sup>
Cadmium D	0.0959	0.4430	-
Chromium T	3	8	50 <sup>d</sup>
Chromium D	0.42	0.65	-
Chromium Hex	2	5	1 <sup>b</sup>
Cobalt T	0.8	2.2	50 <sup>c</sup>
Cobalt D	0.07	0.10	-
Copper T	3.0	7.2	7 <sup>a,6</sup>
Copper D	1.6	3.6	-
Iron T	1865	5649	300 <sup>b</sup>
Iron D	189	366	-
Lead T	3.1	6.2	Varies with hardness <sup>a,7</sup>
Lead D	0.53	0.54	-
Lithium T	9	12	2,500 <sup>c</sup>
Lithium D	6	9	-
Manganese T	64	141	50 <sup>d</sup>
Manganese D	13	41	-
Mercury T	0.0052	0.0156	0.005 <sup>a,8</sup>
Molybdenum T	0.8	1.5	10 <sup>c</sup>

Indicator Metal	Water Quality Triggers		Water Quality Limit
	Mean	Peak	
Molybdenum D	0.7	1.2	-
Nickel T	3.3	8.2	Varies with hardness <sup>a,8</sup>
Nickel D	1.5	4.5	-
Selenium T	0.342	0.581	1 <sup>b</sup>
Selenium D	0.230	0.398	-
Silver T	0.0234	0.0671	0.1 <sup>b</sup>
Strontium T	227	357	-
Strontium D	216	356	-
Thallium T	0.0521	0.1634	0.8 <sup>b</sup>
Thallium D	0.0228	0.1098	-
Thorium T	0.34	1.43	-
Thorium D	0.0276	0.0933	-
Titanium T	29	102	-
Titanium D	2	7	-
Uranium T	0.4	0.7	10 <sup>c,9</sup>
Uranium D	0.315	0.381	-
Vanadium T	4	16	100 <sup>c</sup>
Vanadium D	0.455	0.698	-
Zinc T	12.5	26.6	30 <sup>b</sup>
Zinc D	4.4	12.4	-

Triggers and limits apply at Old Fort Long Term Monitoring Station.

Orange shading indicates the guideline is lower than historical data (generally 1999-2009) for that indicator; orange shaded values are not limits, but eventually appropriate limits will be developed for those indicators. Blue shading indicates the absence of a guideline.

Units for all values are µg/L.

a Alberta Guidelines for the Protection of Freshwater Aquatic Life

b CCME Guidelines for the Protection of Aquatic Life

c CCME Guidelines for the Protection of Agricultural Water Uses

d Health Canada Guidelines for Canadian Drinking Water Quality

e U.S. EPA Aquatic Life Criteria

1 5 µg/L if water pH < 6.5, 100 µg/L if water pH ≥ 6.5. See Table A4 in the framework for pH values from the Old Fort monitoring station.

2 Developed as an interim maximum acceptable concentration

3 Faucets should be thoroughly flushed before water is taken for consumption or analysis

4 Livestock watering guideline is interim

5 Total cadmium =  $10^{0.84(\ln(\text{Hardness}) - 3.3)}$  µg/L, where hardness is measured in mg/L CaCO<sub>3</sub>. See Table A4 in the framework for alkalinity (CaCO<sub>3</sub>) values from the Old Fort monitoring station.

6 The Alberta guideline is for acid extractable copper; however it is being applied to total recoverable copper (a more conservative application of the guideline)

7 Total lead CCC =  $e^{1.273(\ln(\text{Hardness}) - 4.705)}$  µg/L, where hardness is measured in mg/L CaCO<sub>3</sub>. See Table A4 in the framework for alkalinity (CaCO<sub>3</sub>) values from the Old Fort monitoring station.

8 The Alberta guideline for total mercury is draft.

9 Total nickel CCC =  $e^{0.846(\ln(\text{Hardness}) - 0.02584)}$  µg/L, where hardness is measured in mg/L CaCO<sub>3</sub>. See Table A4 in the framework for alkalinity (CaCO<sub>3</sub>) values from the Old Fort monitoring station.

10 Interim guideline

## Schedule F:

### Lakeland Country Iconic Tourism Destination Development and Management Plan

Lakeland Country will be developed as a provincial iconic tourism destination to:

- Diversify the regional and local economy;
- Increase tourism visitation, length of stay, visitor expenditures and enhance recreational opportunities;
- Offer a full range of recreation and tourism settings and activities with a particular focus on the water-based features that are unique in Alberta, and the rich cultural and heritage resources;
- Provide an attractive tourism destination for local, provincial, national and international visitors;
- Support hunting, fishing and trapping (including by aboriginal peoples);
- Protect and maintain private property rights; and
- Honour existing statutory consents and tenures on public lands.

A tourism development and management strategy, referred to as the Lakeland Country Iconic Tourism Development and Management Plan will be prepared to:

- Identify and provide direction to enhance and sustain a quality land base to support tourism development;
- Identify significant recreation and tourism features, settings and scenery on public lands and ensure impacts to these features, settings and scenery are minimized;
- Identify tourism product development priorities for the public, private and not-for-profit sectors;
- Support and enhance historic and current recreation and tourism activities;
- Identify strategies to ensure tourism development is sustainable and meets any regional or area-specific environmental thresholds;
- Identify a destination brand and establish a marketing plan for the destination;
- Provide a detailed implementation action plan, funding priorities and funding strategies.

The plan will be an *Alberta Land Stewardship Act* Issues Specific Plan (ALSA S.10) and will be led by Tourism, Parks and Recreation, with significant consultation and engagement with other ministries, local governments, stakeholders, public and aboriginal people.



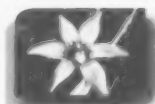
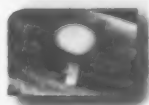
## Schedule G: Lower Athabasca Regional Trail System Plan

Tourism, Parks and Recreation, Sustainable Resource Development and the Alberta Recreation Corridor and Trails Designation Program will collaborate with and engage stakeholders, municipal governments, public and aboriginal peoples to develop a regional trail system plan. The regional trail system plan will:

- Use the Alberta Recreation Corridor and Trails Classification System to identify and designate winter and summer motorized, non-motorized and mixed-use land- and water- based trails, routes and areas that link communities, neighbourhoods, destinations and other jurisdictions with the region's parks, open spaces and recreation and tourism management areas;
- Identify and designate high intensity motorized recreation areas;
- Identify other infrastructure and facilities necessary to support trails based recreation; and
- Be planned, developed and managed in accordance with the standards and guides set out in the Alberta Recreation Corridor and Trails Classification System.

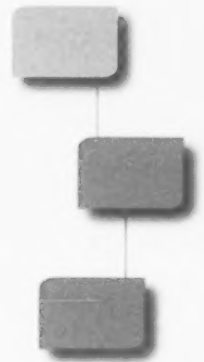
The development of the regional trail system plan will include:


- The identification and analysis of recreation trail demands, supply and gaps;
- An inventory and assessment of the sustainability and quality of existing trails, user-created travel routes and areas;
- The gathering and analysis of environmental, resource, land use, aboriginal and social data and land-use commitments;
- The development, assessment and consultation on options and scenarios for regional trail system design. This will include an assessment of the benefits and risks of these options and scenarios for other objectives in the LARP, their consistency with other provisions in the LARP and existing land-use commitments;
- In accordance with the Alberta Recreation Corridors and Trails Classification System, establish the class, desired experience and explicit management objective statement for each trail, route or area in the system;
- Trail, route and area development, maintenance and management priorities, information and education strategies, and performance monitoring;
- Direction on enforcement, including plans for any modifications of, or enhancements to, the existing enforcement capability needed to achieve timely, fair and effective enforcement of restrictions on trail use, access and associated activities that support the objectives of the regional trail system; and
- The identification of industrial access, resource roads or developments that could contribute to the regional trail system and where reclamation requirements may be deferred and/or amended to reflect their contribution to the regional trail system.



When assessing trail system design scenarios, the following criteria shall be considered in decisions to designate the regional trail system:

- Quality of the recreational experience;
- Sensitivity and risks of unacceptable disturbance to soil, vegetation, watershed, wildlife, wildlife habitat and other forest resources;
- Historic and existing recreational uses;
- Conflicts between motorized and non-motorized recreational activities;
- Conflicts and compatibility between recreation, industrial and other land-use activities including resource development;
- Public safety; and
- Net benefit to the community.





# Appendix 1

## Proposals for Lower Athabasca Integrated Regional Plan Regulations Summary

The Lower Athabasca Integrated Regional Plan Regulations would include several components which are summarized below:

### Part 1 Interpretation

This part of the regulations contains definitions relevant to the regulations including adoption of the regional boundary and what formally constitutes the Lower Athabasca Integrated Regional Plan. The plan is comprised of three instruments:

- Lower Athabasca Region Plan – Strategic Plan (LARP Strategic Plan);
- Lower Athabasca Region Plan – Implementation Plan (LARP Implementation Plan); and
- Lower Athabasca Region Plan Regulations.

This part provides the legal interpretation and legal effects of the LARP Strategic Plan and the LARP Implementation Plan as they apply to the Crown, decision-makers, local government bodies and other persons are described in this part of the regulations. The LARP Strategic Plan is intended to inform and guide land-use activities within the region. The LARP Implementation Plan directs decision-makers and government departments to do certain things to meet the objectives of the regional plan. The LARP Strategic Plan and the LARP Implementation Plan must be taken into consideration by decision-makers in the exercise of their powers, duties and functions, but they are not legally binding like legislation. The regulations would be legally binding on the Crown, decision-makers, local government bodies and other persons.

Part 1 also sets out five years for local governments to provide compliance declarations; and within two years for government decision-makers

### Part 2 Conservation of Ecosystems

This part of the regulations defines some of the key land and biodiversity conservation requirements of the regional plan and includes three divisions:

#### Division 1 - Conserved Land

This division sets out the types of lands that would be defined as conserved lands. It requires that government, through the Designated Minister, monitor and report on the amount of conserved land in the planning region. For the purpose of this division, the Minister of Sustainable Resource Development is identified as the Designated Minister.

## **Division 2 - Conservation Areas**

This division sets out the considerations a decision-maker must take into account with respect to issuing or renewing statutory consents in conservation areas. This division also identifies the conservation areas the Minister of Sustainable Resource Development and the Minister of Tourism, Parks and Recreation are directly responsible for under this division. The requirements for the Designated Minister to establish and maintain programs to evaluate and report on the effectiveness of conservation areas in meeting regional plan conservation objectives are also described.

## **Division 3 - Biodiversity**

This division, which will describe the biodiversity management framework, is anticipated to be completed within two years in the LARP Implementation Plan. When completed, it will complement the air quality, surface water quality and groundwater quality management frameworks described under Part 3 Effects Management.

## **Part 3 Effects Management**

This part of the regulations includes three divisions which define air quality, surface water quality and groundwater quantity and quality management frameworks that have been established to help address cumulative impacts of development within the region. For the purpose of Part 3, the Minister of Environment is identified as the Designated Minister.

### **Division 1 - Air Quality**

This division sets out the requirement for the Designated Minister to establish and maintain programs (under a management framework) to manage ambient air quality limits and triggers for substances that are deemed to be indicators of air quality within the region. Under this division, the Designated Minister is required (as is already the case under the Minister's existing legislation) to: regulate sources of substances in order to not exceed identified limits; establish triggers for management actions; and carry out monitoring, evaluation and reporting on ambient air quality in the region. Air quality indicator limits and triggers identified in the LARP Implementation Plan are incorporated into these regulations.

This division also sets out the requirement for management responses on the part of the provincial government when a trigger or limit has been exceeded and the requirement for reporting a management response.

### **Division 2 - Surface Water Quality**

This division sets out the requirement for the Designated Minister to establish and maintain programs (a management framework) to manage surface water quality limits and triggers for substances that are deemed to be indicators of surface water quality in the Lower Athabasca River. Under this division, the Designated Minister is required (as is already the case under the Minister's existing legislation) to: regulate sources of substances in order to not exceed

identified limits; establish triggers for management actions; and carry out monitoring, evaluation and reporting on surface water quality in the Lower Athabasca River. Surface water quality indicator limits and triggers identified in the LARP Implementation Plan are incorporated into these regulations.

This division also sets out the requirement for management responses on the part of the government when a trigger or limit has been exceeded and the requirement for reporting a management response.

### **Division 3 - Groundwater**

This division sets out the requirement for the Designated Minister to establish and maintain programs (a management framework) to manage water quality limits and triggers for variables that are deemed to be indicators of groundwater quality within the region. Under this division, the Designated Minister is required (as is already the case under the Minister's existing legislation) to: regulate sources of variables in order to not exceed identified limits; establish triggers for management actions; and carry out monitoring, evaluation and reporting on groundwater quantity and quality in the region. Groundwater quality indicator limits and triggers identified in the LARP Implementation Plan are incorporated into these regulations.

This division also sets out the requirement for management responses on the part of the government when a trigger or limit has been exceeded and the requirement for reporting a management response.

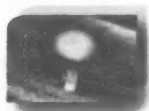
### **Part 4 Recreation and Tourism**

This part of the regulations defines public lands for recreation and tourism and provincial recreation areas, and sets out the considerations a decision-maker must take into account with respect to issuing or renewing statutory consents in a public lands for recreation and tourism area. The requirements are also described for the Designated Minister to establish and maintain programs to manage recreational values in public lands for recreation and tourism areas and provincial recreation areas, and to evaluate and report on the effectiveness of these areas in meeting regional plan recreation and tourism objectives. For the purpose of this part of the regulations, the Minister responsible for the *Provincial Parks Act* is identified as the Designated Minister.

### **Part 5 Coming Into Force, Related Amendments and Expiry**

This part of the regulations sets out transitional rules for decision-makers regarding existing and new statutory consents once the regional plan comes into force. This part also specifies the date when the Lower Athabasca Regional Plan comes into effect, as well as the expiry date of the regulations.

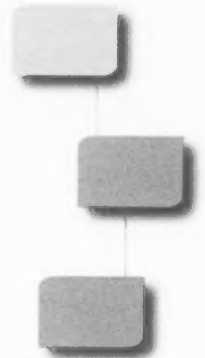
Amendments to the *Water (Ministerial) Regulation* to ensure alignment with the regional plan are also described here.





### **Schedules 1 to 5**

Schedules 1 to 5 provide additional detail regarding the designation of each of the declared conservation areas, transitional requirements about rescinding existing statutory consents and determination of possible compensation.



This material is intended for discussion purposes only and is a model of what the proposed regulation might look like. It is not in any way intended as a representation of Government of Alberta policy, and the Lieutenant Governor in Council has not made any decision with respect to the subject matter of this material.

